

College and Research Libraries

Bimonthly and Puture Program of

Coordination of Security Security

No of TARS to Out-of-Prior Boy

Frediens to the Application of University

Proposed Expanding of the Library of

Providential Physics The Diplied States

Selected Reference Books of 1956-1966

College and University Divery Smithtle

COLLEGE AND REFERENCE LIDRARIES

Coming in 1956! American Culture Series II

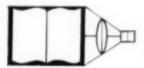


5000-6000 TITLES...
ALL THE MATERIAL NEEDED
FOR AMERICAN STUDIES
PROGRAMS

A new "package" library to provide complete material for any College or University presenting an American Studies Program will be started next year by University Microfilms. It will start with the 1493 Epistola of Columbus and continue through 1876.

Selection of books and fields to be covered are under the direction of our American Studies Association committee of: Howard H. Peckham, William L. Clements Library; Louis B. Wright, Folger Library; Stanley Pargellis, Nurberry Library; Robert Land, Library of Congress; George R. Taylor, Amherst College; H. Dan Piper, California Institute of Technology; and Clyde Walton, State University of Iowa Libraries.

Only books not readily available will be filmed, although all pertinent tatles will be included in the bibliography. Delivery of the positive microfilm is planned at the rate of 100,000 pages per year for an annual subscription charge of \$500.00. It is estimated that 500,000 to 600,000 pages will be reproduced. If you want to receive complete information about this program as it progresses, send in your name and library address.



UNIVERSITY MICROFILMS

Please mention C . R L when corresponding with its advertisers.

PICTURES & PRINTS

FINE ART SOURCE BOOK

CONTAINS OVER 500 ILLUSTRATIONS

Our newest edition contains the World's largest collection of fine full-color art reproductions from every important school of painting. Lists over 4700 prints, has more than 500 illustrations. A necessary catalog for every library and reading room. \$1 peetpaid.

FREE ART LOAN EXHIBIT of over 100 framed masterpiece prints available to accredited institutions. Write for details.

Oestreicher's

Dept. CL 1208 Sixth Avenue New York 36, N. Y.

WALTER J. JOHNSON, INC.

Sale and Acquisition of

- Scientific periodicals: complete sets, short runs, single volumes—all fields, all languages
- Scientific books: out-of-print—domestic, foreign
- Complete subscription service for domestic and foreign periodicals
- All new books of U. S. and foreign publishers.

Send requirements and offers to

WALTER J. JOHNSON, INC.

125 East 23 Street, New York 10, N.Y.

Telephone: ORegon 7 6713

Cable address: BOOKJOHNS, N.Y.

Branch offices in London and Frankfurt

Catalogues available on request





HOW TO TAKE THE WORK OUT OF LIBRARY PLANNING



Whether you're planning a new library or expanding and reorganizing an existing one, you can put all your problems in the lap of Globe-Wernicke's competent Library Planning Staff. By doing this you not only get the free service of trained specialists but also you obtain the highest quality library equipment available today.

Consult Globe-Wernicke's Library Engineering Staff for personal service, or write Dept. C-16 for Catalog 314, which contains complete information on G/W bookstacks and associated library equipment.



Manufacturers of the World's Finest Library Book Stacks, Office Equipment, Systems, Filing Supplies & Visible Records.

Please mention C & R L when corresponding with its advertisers.

The Literature of Japanese Education-1945-1954

Compiled by Walter Crosby Eells

viii, 210pp. Index Cloth \$5.00 Annotated references to over 1800 publications.

"... there can be little difference of opinion as to the value of making available in convenient form information concerning the extensive literature which has grown out of this vital decade 1945-1954 in the history of education in Japan."

-INTRODUCTION

THE SHOE STRING PRESS

51 Caroline St.

Hamden 17, Conn.

OLD BOOKS

Rare & Out-of-Print Books in Many Fields of Scholarship

Americana. Books on the Arts & Crafts, First & Other Scarce Editions in Literature, History, the Sciences, etc., Historical & Literary Manuscripts

Catalogues Issued

GOODSPEED'S BOOK SHOP, INC.

18 Beacon St., Boston 8, Mass.

Old Books Bought & Sold

Three recent important titles from

The Antioch Press

DEVIL'S DIARY

The Documentary Record of Nazi Conspiracy and Aggression

Edited by JOHN L. STIPP, introduction by KURT VON SCHUSCHNIGG

"A compilation of extracts from some pertinent and highly interesting documents presented at the Nuremberg trials . . the official documents, recorded conversations and diary entries of leading German figures in their plans for European conquests."—Current History \$3.75

WILDCAT STRIKE

by ALVIN W. GOULDNER

The first book-length study of a wildcat strike and one of the few sociological studies in depth of any kind of strike. An important contribution to the science of human behavior. "The implications of this strike and the application of its lesson will be of significance to all who are concerned with industrial relations."—NEMA Industrial Relations Memorandum. 33.00

SEARCH FOR PURPOSE

by ARTHUR E. MORGAN

The "spiritual autobiography" of a major public figure—famous flood-control engineer, first chairman of TVA, former president of Antioch College, international consultant on community relations. "A prophetic analysis of the spiritual and scientific dilemma of modern man."—N.Y. Times Book Review \$3.00

-Send for our complete catalog-

THE ANTIOCH PRESS
Associated with Antioch College
Yellow Springs, Ohio

Please mention C & R L when corresponding with its advertisers.



FOR LIBRARY PLANNERS

Inspire your planning imagination with the result of "new thinking" in library equipment — TREND library furniture.

TREND furniture, with its flush construction, rounded corners and simple lines, is designed and built to meet the library needs of both today and tomorrow. TREND blends beauty with comfort and durability to achieve livability and enduring pleasure. And, TREND Color Line Library Tables, with tops in eight soft decorator colors, bring a new element . . . color harmony . . . to your library interiors.

Above all, the research, testing and "know how" embodied in TREND furniture is the exclusive result of Library Bureau's 75 years of experience — experience that can also provide you with a wealth of planning information.

Whether you are building a new library, modernizing or expanding an existing one, see why librarians and library architects the nation over are specifying TREND. See TREND furniture in Library Bureau's new furniture catalog LB709. Write today for your FREE copy!



Please mention C & R L when corresponding with its advertisers.

Report on The Harvard University Library

A Study of Present and Prospective Problems

> by Keyes D. Metcalf

The Report, prepared with the cooperation of the Library staff, has been published by the Library with a view to dissemination to other institutions and administrators sharing similar problems. The contents will indicate the range of topics treated: Acquisition, Cataloguing, Service to Readers, Inter-library Cooperation, Space, Personnel, Administrative Organization, Finances, Summary and Conclusions, and the following Supplements: The Harvard University Library: A Graphic Summary, The Development of Library Resources at Harvard: Problems and Potentialities, Cataloguing in the Harvard Libraries, The Proposed Merging of Catalogues and Related Changes in Widener, The Proposed Training Program for Library Administrators, Needs for Additional Funds, A Selected Bibliography. There is a foreword by President Pusey.

The volume, cloth-bound, contains 131 pages, $6\frac{1}{4}$ by $10\frac{1}{4}$ inches. Copies at \$2.50 each, postpaid, may be ordered from the Office of the Editor, Harvard University Library, Cambridge 38, Massachusetts.

More than 9,000 titles—in 34 different. languages—listed and described in the latest

FOREIGN AFFAIRS BIBLIOGRAPHY

A SELECTED AND ANNOTATED LIST OF BOOKS ON INTERNATIONAL RELATIONS, 1942-1952

By HENRY L. ROBERTS

The indispensable reference book for all libraries—a decade of significant titles covering not only international relations (contemporary history, politics, diplomacy, economics and finance, international law and world organization), but all related subjects (political philosophy, comparative government, social development, religion, cultural relations, population and racial problems and modern warfare).

You'll find listed here books on General International Relations—The World Since 1914—The World by Regions, in languages ranging from Afrikaans to Erse, from Ukrainian to Yiddish. Complete bibliographical data on 475 separate classifications. A book that will enlarge the scope of your foreign affairs library as no other single volume can. 727 pages.

Published for the Council on Foreign Relations by HARPER & BROTHERS, New York



AMERICAN BOOK-PRICES CURRENT

509 Fifth Avenue, New York 17, N. Y.

NOW READY

THE 1955 EDITION

The 61st consecutive annual volume of AMERICAN BOOK-PRICES CURRENT will report about 15,000 price records, from the low of \$5 to the season's high of \$25,000. The entries derive from 117 sessions of book auctions held in the United States from July 1954 through June 1955.

This is the standard reference guide for Librarians, Booksellers, and all others interested in the current market values of books, old and modern. Separate sections are devoted to autographs & manuscripts, broadsides, and maps.

680 pages, bound buckram

\$15.00 net

(4th class parcel post prepaid on orders accompanied by payment)

BOOKS and PERIODICALS on and from EASTERN EUROPE and ASIA MOUTON & CO.

Modern and Antiquarian Booksellers THE HAGUE—HOLLAND

Two series of CATALOGUES: Books on Eastern Europe (green) Books on Asia (yellow) Two series of BULLETINS: New Books on Eastern Europe New Books on Asia

- Free on application
- · Post free delivery
- Special terms for LIBRARIES

Please mention C & R L when corresponding with its advertisers.

COLLEGE AND RESEARCH LIBRARIES

MAURICE F. TAUBER. Editor

SAMRAY SMITH, Editorial Assistant, Advertising Manager

EDITORIAL STAFF

	E-first street and the control of th
Rook Notes	CARLYLE J. FRAREY
D. Hairon	RALPH E. ELISWONII
\$4 L L-	ENS 24 HICKORY
B. 1	The state of the s
News	LAWRENCE S. THOMPSON
Personnel .	ROBERT B. DOWNS
Resources .	the Editor C. DONALD COOK; JOHN RATHER
Assistants to	the Editor C. Donald Cook, John

Reference Libraries, a division of the American Library Association. It includes general articles, official reports, addresses, reviews of selected books, and news from the field of wide professional interest. It is indexed in Library Literature.

Manuscripts of articles and addresses and copies of books submitted for review should be addressed to the Office of the Editor, School of Library Service, Columbia University, New York City 27. Contributors should examine copies of past issues for style, and should submit articles carefully typed, double-spaced with wide margins. Requests for reprints should be addressed to ACRL, American Library Association, 50 E. Huron St., Chicago 11, at the time the notification is received of the issue in which the article is scheduled to appear. Advertising should also be atranged with the Chicago Office. The scope of the journal does not permit inclusion of personal communications or exhaustive coverage by reviews of the literature of librarianship.

Editors: Material in COLLEGE AND RESEARCH LIBRARIES is not copyrighted. Permission to reprint should be obtained from the author and editor. No comment or pronouncement can be cited as official endorsement of the Association of College and Reference Libraries or of the ALA. The assumption of editorial responsibility is not to be construed necessarily as endorsement of opinions expressed by writers.

necessarily as endorsement of opinions expressed by writers.

Subscription price: to members of the Association of College and Reference Libraries paying ALA dues of \$6.00 or more, \$2.00 per year, included in the membership dues assigned by ALA to ACRL; to members paying less than \$6.00 and to nonmembers,

\$5.00 a year. Single copies \$1.25; orders of five or more at \$1.00 each.

Checks for subscriptions or ALA membership should be made out to the American Library Association. Correspondence about subscriptions and notification of change of address (three weeks notice requested) should be sent to the American Library Associa-

tion, 50 East Huron Street, Chicago 11, Illinois.

Members of the American Library Association may become members of ACRL by indicating this as the division of their choice when paying ALA dues without the payment of additional dues. ALA members wishing to belong to more than one division must pay to the ALA an additional twenty per cent of their ALA dues (not over \$2.00) for each additional division.

COLLEGE AND BESSEARCH LIBRARIES is published bimouthly—January, March, May, July, September and November—by the American Library Association at 1201-05 Bloff Street, Fulton, Missouri. Application pending for transfer of second-class entry to the post office at Fulton, Missouri. Accepted for mailing at the special rate of postage provided for in the Act of February 28, 1925, embodied in paragraph (d) (1), section 34.40, P. L. & R.

NEW BOOKS from McGRAW-HILL

Published in December and January . .

American Mathematical Society Edited by John H. Curtiss, Jr. NUMERICAL ANALYSIS

Volume VI-Proceedings of Symposia in Applied Mathematics

Ashley

ELECTRICAL ESTIMATING New Second Edition, 392 pages, \$8.00

Axelrod and Schultz
HANDBOOK OF TROPICAL

AQUARIUM FISHES 704 pages, \$13.50 Dorcum

HYPNOSIS AND ITS THERAPEUTIC APPLICATIONS

120 pages, \$7.50 Drucker

INDIANS OF THE NORTHWEST COAST

232 pages, \$5.75 Haas and Whiting

DYNAMICS OF INTERNATIONAL RELATIONS

McGraw-Hill Series in Political Science

562 pages, \$6.00 Haire

PSYCHOLOGY IN MANAGEMENT

McGraw-Hill Series in Psychology 220 pages, \$4.75 (text edition available)

DYNAMICS OF MACHINERY
McGraw-Hill Series in Mechanical Engineering

Harvard Business Review Edited by Edward C. Bursk and Dan H. Fenn, Jr.

PLANNING THE FUTURE STRATEGY OF YOUR BUSINESS

318 pages, \$4.25 Hildebrand

INTRODUCTION TO NUMERICAL

International Series in Pure and Applied Mathematics 526 pages, \$8.50

Hine

PHYSICAL ORGANIC CHEMISTRY

492 pages, \$9.00

Hollaender RADIATION BIOLOGY

Volume III: Visible and Near-Visible Light 744 pages, \$10.00

Kirby, Withington, Darling, and Kilgour ENGINEERING IN HISTORY

544 pages, \$8.50

LaLonde
PROFESSIONAL ENGINEER'S EXAMINATION QUESTIONS AND ANSWERS
472 pages, \$6.50

Laughner and Hargon HANDBOOK OF FASTENING AND JOINING OF METAL PARTS 632 pages, \$15.00

Peurifoy
CONSTRUCTION PLANNING,
EQUIPMENT METHODS
McGraw-Hill Series in Civil Engineering

McGraw-Hill Series in Civil Engineering 558 pages, \$8.50

Rubin and Novak INTEGRATED GYNECOLOGY Volumes I, II, III—\$60.00

Shreve

THE CHEMICAL PROCESS INDUSTRIES

McGraw-Hill Series in Chemical Engineering New Second Edition. 1016 pages, \$11,50

Sokolnikoff
MATHEMATICAL THEORY OF ELASTICITY

New Second Edition, 465 pages, \$9.50

Wilson and Ries PRINCIPLES OF CHEMICAL ENGINEERING THERMODYNAMICS

McGraw-Hill Series in Chemical Engineering 188 pages, \$7.50

ORDER NOW! -

Order now and have the books available during the first days of publication.

McGRAW-HILL BOOK COMPANY, INC.

330 West 42nd Street

New York 36, N. Y.

Please mention C & R L when corresponding with its advertisers.

College and Research Libraries

-					
(0	11	TC	n	CS

BIMONTHLY AND FUTURE PROGRAM OF COLLEGE AND RESEARCH LI-	11
	13
BRARIES THE COORDINATION OF FACULTY SERVICES. By John C. Abbott and David Kaser THE COORDINATION OF FACULTY SERVICES. By John C. Abbott and David Kaser	16
TAA D OF THE PRINT BOOK STARCHING, DV EMERSON JAMES	*
PROBLEMS IN THE APPLICATION OF UNITERM COORDINATE INDEXING. By June 15 June 14 Februard P. Therigald	19
PROPOSED EXPANSION OF THE Library of Congress Catalog—Books: Authors INTO A CURRENT NATIONAL UNION CATALOG, 1956. A SYMPOSIUM INTO A CURRENT NATIONAL UNION CATALOG, 1956. A SYMPOSIUM	24 24
the Proposal By Charles W. David	
The Proposal for a Current Author Catalog of American	28
to the College Library Vick Dolli. Dy Helen in the	34
not be the National Union Catalog, by	36
	41
SELECTED REFERENCE BOOKS OF 1954-1955. By Constance M. Winchell	45
PRESIDENTIAL NOTES - L. LCPL Audio Visual Committee	55
the state of the s	5.5
Company STATISTICS, 1994 30, Complete by	56
	В
BOOKS RECEIVED	8
Process	8
Personnel	9
	g
	9
	9
	6)
	1
to the Description Fattingers Raidn R. Shaw	-
	-
the state of the s	-
to the Declary Franck I Nebtek	
Ct. Sections William H. Jesse	
Reference Services, Florence M. Gifford	
Values It is in the center of this issue.	

January, 1956

Volume 17. Number 1

A MERICAN LITERATURE

Volume I Henry Adams to Donn Byrne
Compiled by JACOB BLANCK
A must for every library and reference collection

The complete work, in eight or nine volumes, will contain some 35,000 items by 300 selected authors, from the beginning of the Federal period up to and including writers who died before the end of 1930 The emphasis is on belles lettres; descriptions of all first editions are included, with briefer notes on first appearances of any sort, and detailed bibliographical data

Volume 1 — A B Henry Adams Donn Byrne 3,200 entries, 41 authors 525 pp. 44 pp. illustrations \$15.00

Place your order now for Volume I and continuation



YALE UNIVERSITY PRESS

HENRY ADAMS Note: See under 1888 for privately printed first 9 Vols printing Note: Vol. 1 noted in two states. In Press Vols VVI VIIIX, described as I undir ale 2. At p. cites only Vols VII IX are described as America EC (121) HUPL (121) is (und) QUIEN DE MISTORY OF THE UNITED STATES
OF AMERICA DURING THE SECOND
ADMINISTRATION OF JAMES MADE PRIVATES Constale 1110, 117 134 113-27 NEW YORK CHARLES MERIRARE S WING 1894 Self wrapper. 5 Vals. 3 Von.

1. (***iii) (***) 417, x blank leaves, leaf excised
or pasted under and paper, 4 planes and x
or pasted under the first knaves, leaf excised
or pasted under the end paper to planes and 6
fished plates inserted.

3. (***iii) (***) *** flank leaves, leaf excised
(***iii) (***) *** flank leaves, leaf excised "As to the almost its beir ton copy wat Letter W C 1 thin) inserted ; Maran would mother, brother facts, the visitor lish after suppl 3 (1 vin), 413 369, 8 blank lexics, leaf excited on panel under end paper. () t. 136°, 276, 276 record or parted under when he could d home - Koherr end paper 2. c.s. 124. (25)4. (25)4 extined or pented at. Annual Report end paper 5 24° 240 exceed or posted under Westington Go V. chath. Stay green. Gray coaled end papers. The Tendency of issued as a separate: Priced at from of each vorume.

Department fan 12, 1891 Puthished fan 12, 1891
gustinher's statement, Astronom as jour fact,
ticket in pw fan 10, 1891 Latted pw fan 17. issued as a separate; a Issued after March z. H NIPL V *5 HISTORICAL ESSAYS NEW YORK CHARLES SCRIENTER'S SONE SHIPS The Tendency Annual Report of the Association for 1894. I civity, extrapt, blank leaf, 710° x 4110° (45), (has, 126, 270. Washington Coverne V cloth Bray green Grave france Congran Reduced facsimile: actual page size 7%" x 10"

Bimonthly and Future Program of COLLEGE AND RESEARCH LIBRARIES

Dering the spring of 1955 a questionnaire was sent to members of ACRL, asking for comments on the format and contents of College and Research Libraries and for suggestions of ways for improving the journal. The purpose of this brief statement is to report on the results of the questionnaire.

Out of a total distribution of 5,072 blanks, 1,429, or 28% of the total, were returned by readers. For those who were interested enough to reply, there was a serious effort on their part to assist the Editors, and many readers provided spe-

cific suggestions.

Features. Practically all of the features of CARL are considered useful by most of the readers contributing comments. There was an especially strong following for "Selected Reference Books," "New Periodicals," "Reviews," and "News from the Field." Such features as "Personnel" and "Statistics" claimed less interest. "Notes from the ACRL Office" and "ACRL Minutes" were considered desirable, but like the reports of most meetings and actions of organizations, were of least interest.

Conflicting opinions were held by some of the members in regard to the coverage by "Personnel" and "News." Some suggested that the scope of these features was not large enough, and a smaller number preferred greater selection so that the presently allotted space could be used for additional articles.

Although a total of 893 readers reported that they used "Statistics" regularly. 1,101 indicated that they would have no objection to their appearance in some source other than CARL. During this year the question of the publication of the "Statistics" will be considered by

the Committee on Statistics and the editorial staff.

Format. Actually, there were only 11 comments directly concerning the format of the journal. These referred to printing fonts and the crowded make-up of pages. It is expected that new printing arrangements may be accompanied by improvement in format. Particularly wanted were captions in articles and in such features as "News." Authors have sometimes in the past complained about the addition of captions to sections of their papers; they can help by supplying such divisions themselves. Attention was also called to the use of broad titles to describe articles which warrant more specific titles.

Advertising. About two-thirds of the readers responding indicated that they used the advertisements for information concerning books, supplies, and other items. Only one person suggested the re-

moval of advertising.

Distribution of CARL. Of the 1,042 readers who answered the queries on the use of the issues of CARL, 539 reported that only they read their copies. Two people read issues received by 147 members, and several examine those received by 356 readers.

Articles. The largest amount of comment was concerned with the articles. One can only report after reading the remarks that all articles have some interest for some readers. It would not be unfair to state, however, that the readers uniformly requested articles which have to do with library practice. An unusually large number were appreciative of the descriptions of operations, particularly if they were new approaches, in specific libraries. Imaginative proposals for mastering pressing problems were also wanted. Surveys of practices in groups of libraries had an appeal to a large number of readers, particularly if conclusions were reached on desirable practices. A fairly large group asked if more articles applying to problems of the smaller library could not be included in future issues. Articles evaluating equipment were regarded as especially useful. Five or more readers requested articles on the following subjects: academic status, acquisitions (problems of college libraries, film libraries, salary increments, libraryadministration relations), audio-visual work, buildings (layout, furniture and equipment), cataloging (cataloging-reference relations, cataloging problems in small libraries), circulation (charging systems for college libraries, comparative methods), college libraries (role of library in general education, the library staff in the academic situation, staff-administration relationships, building book collections), cooperation (in acquisitions, areas of subject responsibility, bibliographical centers, deposit libraries), exhibits, faculty-library relationships, history of libraries, personnel (problems, administration, personnel practices), reading (importance of content of books to librarians, ways to encourage staff reading, ways to encourage reading of undergraduates), reference service (interlibrary cooperation, extending resources, solution of difficult reference questions, extending services, services in public libraries, controlled studies of various aspects, reference-cataloging relationships, training of reference librarians), research projects (listing of studies completed in library schools or in libraries), reviews (covering more evaluation of titles), science libraries, small college libraries, surveys (reports on individual libraries, management surveys and work simplification), teachers college libraries (administration, book selection, role of AACTE, use of the library, studies of effects of reading, how to teach with books), technical processes (subject divisional arrangement, order procedures), and use of the library (methods of increasing use, library handbooks).

The Editor and the editorial staff are gratified by the interest shown by the members in the questionnaire. We are quite proud of the bouquets which were included in the forms which were returned. We are constantly conscious of shortcomings, and are grateful for the occasional, unsolicited suggestions. The Editor and the staff consistently try to learn of studies which have been completed or are in progress, and solicit papers from the field. As the official journal of ACRL, we are concerned about publishing papers presented at the Association's conferences, minutes of meetings, and other activities related to the group. This is probably as it should be. At the present time, although we are embarking on a bimonthly basis, there is no indication that additional space will be forthcoming in the journal. Space limitation, therefore, restricts somewhat the possibility of presenting all phases of our work that the readers would like to see included. Perhaps in time this limitation will be minimized.

A journal is as strong as its members would like to make it. The editorial staff members have been exceedingly helpful in the past in reviewing papers submitted by ACRL members and others. We try to eliminate those topics which have been covered in the literature in either book form or in periodicals, but we sometimes run a paper which emphasizes a point of view which bears repeating, if there is a new slant involved. The protest by some reference librarians and librarians of small colleges that we have neglected their areas can be helped by spelling out the situations, conditions, or operations which require study. The "A-V Clearing House," introduced in the July, 1955, issue, is designed to

(Continued on page 40)

The Coordination of Faculty Services

Mr. Abbott is librarian of Trinity University, San Antonio, Texas; Mr. Kaser is assistant in gifts and exchanges, University of Michigan Library.

There has been considerable discuslibrary service and facilities to the undergraduate. Many universities are thinking in terms of undergraduate libraries, either of the Lamont type or of the lower divisional variety developed at Iowa. Colleges, too, are developing their own adaptations of these plans. It does not appear, however, that equivalent attention is being given to another major component of academic library clienteles the faculty member.

From the service point of view, the faculty member has been the forgotten man in library thinking for some time. There seems to be an assumption that he is mature, that he has fulfilled his research apprenticeship, and that he ought to know how to get what he wants out of a collection of books. The result is that he has been left largely to his own devices. He has a few troubles, but he usually feels that many of these are the fault of the library. He may be right. The fact is, however, that the average faculty member can get along only "pretty well" in a library. Certainly there must be more effective means for dealing with his needs than those currently in

Under the functional system of library organization the two chief service areas are the reference and circulation departments. A large share of the problems of the faculty member, however, are of a different nature from those with which these departments are designed to deal.

The faculty member comes to the library to do research, to see how he can relate class assignments to the library's resources, to plan a new course, to discuss the development of the library's collections in his area of specialty. A half century ago he would probably have taken all these problems to the chief librarian, but today that position is filled by a busy administrator. The instructor is confronted instead with a battery of officers and underlings, each with his own separate area of responsibility. He is fortunate if he can find a single person who has competence in, interest in, or responsibility for, his field of interest.

Yet why should this situation exist? There are probably more people with advanced subject training working in libraries today then ever before. Many specialists are being assimilated into the library's order, catalog, reference, and circulation departments, or into divisional or departmental libraries, where their subject training is often subordinated, sometimes overwhelmingly, to their other duties. Undoubtedly such specialists could do much more to assist the faculty member if, for purposes of administrative facility, they were not tied to a particular department.

It is the purpose of this paper to suggest that if these specialists could be released from their more general library duties and each given the responsibility of assisting the faculty member in their mutual area of specialization, library-faculty relations could be greatly improved. As a staff officer, the province of such a specialist would cut horizontally across all conventional lines of library departmentalization, thus enabling him to give many services "between the

lines." Depending upon local circumstances, he might deal with only one academic department, or he might be concerned with several related departments. In some instances his function might cut across several departments, but not fully include any of them. In actual practice it might be more suitable to call him the "Historical Studies Librarian," or some other similar term more precisely descriptive of his duties.

In addition to his advanced subject training, this specialist would have an extensive knowledge of the library, its catalogs, its collections, and its peculiarities-those ever-present individualistic elements which only the history of the institution can explain. Besides having a wide familiarity with bibliographical tools, he would know something of the historical development of his subject, be familiar with the book trade, and have a basic knowledge of the principles of bibliographical description. He should have training in foreign languages. He should be acquainted with the existence in other libraries of research collections pertaining to his subject. He should be expected to belong to professional organizations in his special subject area as well as to the appropriate library associations.

In the way of research assistance, he would not only compile bibliographies for faculty members, as is already being done in some academic libraries, but he would also abstract articles and books, arrange for translations of articles written in languages outside the linguistic competence of the instructor, search for, collect, and organize data, carry on correspondence with other research libraries regarding materials; in short, do everything useful to the researcher with the exception of the actual interpretation of the data. Since he would devote much of his time to this type of work, he could presumably do it better, more accurately, efficiently, and rapidly than an instructor, who, because of his other academic obligations, can devote only a few hours a week to its accomplishment. This principle has long been recognized in legislative reference services at both the federal and state levels.

The obligations of the librarian in this type of work would extend well bevond the research assistance function. Since he would be almost as much a member of the academic department as of the library staff, he might well be obligated to attend all departmental faculty meetings, acting as a resource person to the faculty in library problems. He might well serve on dissertation committees. In this capacity he would be especially helpful in the beginning stages when the subject of the dissertation is being assessed in terms of the available library resources. It would he his duty to keep informed regarding the assignments being given by instructors. In this way he would be in a position to make suggestions that would keep such assignments realistically related to the resources of the collections. On the other hand, he would be able to see that the library anticipated the demands that would be made upon it. When new courses were being considered, his advice regarding the library's resources in the area would be valuable. He himself would probably be the natural person to teach courses in bibliography and to lecture on library use and facilities.

One of the more important functions of this specialist would be as bibliographer in his subject area, where he would be charged with a major part of the responsibility for the systematic development of the book collections. He would inform faculty of available items likely to be of interest. Faculty requests would go through him for his suggestions, if not approval. He could work closely with the director and the department in locating and assessing special collections that might be purchased or

obtained for the library as gifts. He would aid in filling in gaps in the collections that might be called to his attention by new instructors. In short, he would keep his bibliographical acumen at all times at the faculty's disposal. Conceivably, over a period of time, as the faculty learned respect for his scholarly integrity, it might choose to relinquish to him the major burden of book selection.

There are, of course, many other ways in which such a person could facilitate the faculty member's work with the library's collections. He could see that a dictating machine is available to the faculty member who chooses to take his notes on tapes or wires or cylinders. The same could be true of typewriters, photocopying devices, or whatever other mechanical conveniences science is making available. He could have student assistants search current periodicals, notifying faculty members when articles appear on subjects in which they have indicated their interests. He could see that local indexes were maintained of subject materials which do not receive that treatment from usual indexing media. He could keep informed as to the location of other research collections; and he should be free to travel to consult such collections when a particular research problem being pursued demands. Experience and imagination would indicate other areas in which such a librarian could render valuable service to the faculty member.

Of course the specialist's services need not be confined to the faculty. Certainly he frequently would be called upon by the library staff itself to assist in solving complex classification problems and in answering reference questions that required special knowledge. If the undergraduate had needs that the reference department was unable to fill, the student could consult the specialist. Graduate students would consult him more often, but since they are expected

to perform for themselves certain academic "finger exercises" as part of their educational experience, they would receive more guidance than active assistance. Probably the specialist's services would not be too much in demand by students, however, because their concern with the library is unidimensional; they are interested in it only as a source of information. The faculty member not only shares this concern, but in addition has obligations regarding the selection of books and the coordination of his course work with the resources and services of the library.

In addition to the better service and better book collections that would result from such a program, it would seem reasonable to expect several other fortunate developments. For example, it is probable, that such assistance would further stimulate productive research in the campus community. It should help to minimize further departmentalization of the collections, since in the performance of his duties the specialist would be providing many of the services that the faculty expects to gain under the departmental arrangement. It would help to raise the status of librarians among academic personnel. The creation of such a position would make the profession more attractive to capable persons with strong subject backgrounds. In addition to being an excellent training ground for higher administrative responsibility, it would also be an area in which capable people not interested in administrative work might rise to the top of the profession.

It is not supposed that full acceptance of this service could be established overnight. In some areas there would be skepticism. Advances would have to be made a step at a time; there would have to be adaptations to fit local conditions. For example, the local library would probably find it impracticable to establish immediately a department of sub-

(Continued on page 40)

The Use of TAAB in Out-of-Print Book Searching

Mr. Jacob is order librarian, Michigan State College Library.

How to acquire out-of-print publicareasonable prices is a perennial problem in college and university libraries, With enrollments increasing and graduate and research programs being expanded the demand for books and monographs no longer available from the publishers is a growing one. Usually the publications are needed for special research and graduate program activities. There is, however, a constant demand for certain titles needed for undergraduate reserve reading lists. The filling-in of the library's holdings, generally, also necessitates some provision for the acquisition of out-of-print materials.

In the libraries of larger institutions the accumulation of order cards for outof-print items can assume alarming proportions within a few years' time. The criteria, of course, that determine which items requested shall go into desiderata lists will affect the size of the accumulation. If a library were to consider all items routinely requested, but found to be out of print, and all items from second-hand dealers' catalogs reported "sold" as legitimate searching items, the desiderata lists would naturally grow quickly. If, on the other hand, the burden of urgency is placed on the requester, the lists are usually kept manageable. Second-hand dealers' items reported "sold" may be so reported to the requester with or without the suggestion that the item can be searched for. A

routine request for an item found to be out of print may be returned to the faculty member concerned either with the simple notation that it is out of print or with a form slip suggesting that if the item is urgently needed it can be searched for. In any case some control over the size of desiderata lists and some provision for occasional weeding of searching files are desirable.

There are, of course, various methods of searching for out-of-print books. The commonest procedure, probably, is to type a list of items from the order cards and to submit it to an established dealer who offers a searching service. It is desirable, in this case, to keep a carbon of the list which can be checked as items are offered and which can give a quick indication of the progress of the searching effort. Some libraries put a time limit on the list and notify the dealer to this effect. The unlocated items are then listed with another dealer.

Another method of handling the outof-print problem involves members of
the library staff indirectly doing their
own searching. Order cards are filed
into a desiderata file in the order department and newly received dealers' catalogs are regularly checked against this
file. It is argued that with this method a
fair percentage of books are found expeditiously and that the prices are lower
than if a searching service has to find
specific books on a specific list.

There are, of course, other methods of finding out-of-print books and there are

¹ Maurice F. Tauber, "Desiderata Files," Stechert-Hafner Book News, V (October, 1959), 2.

permutations and combinations involving these and also involving such things as subject specialization and dealers who specialize. It is proposed, however, in this short paper, to treat a method used by some libraries and one which has seemed, in our experience with it at Michigan State College, to be superior to other methods in numerous respects. Other libraries, doubtless, have used this procedure more extensively than we have; however, it is hoped that a specific account of results obtained by us over a period of several years may be of interest.

I should like to report on our experience with the searching service offered by TAAB Weekly which is also variously known as The American Antiquarian Booksellers' Weekly and as The Library Bookseller. This publication is a kind of weekly depository of library want lists and is circulated from its office in Philadelphia2 to around 125 booksellers. The participating book dealers are somewhat concentrated in the New York-Philadelphia area. However, many dealers in New England, the Middle West, the West Coast and some even in Great Britain are active in the project. When want lists are received from libraries they are inserted, free of charge, usually within a week or so. Long lists are staggered over several issues of TAAB.

In approximately two weeks dealers begin quoting directly to the library on its want list. The quoting progresses alphabetically down the want list and this facilitates the clerical work of coordinating the quotations. Under our procedure, when quotation cards are received, order cards corresponding to the items quoted on are withdrawn from the desiderata file. The items on our carbon copy of the typed want list are checked as quotations are received so that as new offers are received in the days following, we can see at a glance whether the order

card has been removed previously.

It is advantageous to have a large table, or some spacious area (to offer a homely suggestion), in order that quotation cards and order cards can be laid out for coordinating and comparison purposes. One title may be offered five or ten times over a period of a week or so. Also, some dealers offer eight or ten items on one card while others will quote on just one title. A decision has to be made among the various quotations not only on the price but also on the most favorable grouping of the orders. That is, a slightly higher price may be paid for one item because it can be bought with three or four other titles from the same dealer thus reducing overhead on the processing of orders.

When a decision has been made on an individual offer the dealer's card can be returned with the request either to send the item or to hold it for an official order. Our practice is to return all cards when the items are not taken, with notations that lower quotations or earlier offers were received.

Over a period of several years we have sent TAAB seven want lists. The subject matter has been quite general in character. There has been some concentration in the areas of English and American literature, history, Americana, public speaking, business education and, to some extent, in pure and applied science. As indicated earlier, quotations were received in about two to three weeks after the lists were sent in. The results on the lists were as follows: list 1, 80 titles listed, 27 quoted on; list 2, 111 titles, 68 quoted on; list 3, 507 titles, 258 quoted on: list 4, 88 titles, 47 quoted on: list 5, 48 titles, 15 titles quoted on; list 6, 781 titles, 363 quoted on; list 7, 123 titles, 54 quoted on. The overall figure is 832 titles quoted on out of 1738 titles listed, or 47%. The library accepted about 90% of the titles offered and the average price paid per title was

^{*} Address | 579 South Melville Street.

An important feature of TAAB service is the competitive aspect of the quotations. In the opinion of the writer the majority of the offers could be described as "quite reasonable." In many cases, as might be expected, the prices were actually lower than the original list prices. In other cases where the prices asked were somewhat higher, especially where there were few quotations or only one, it was difficult to judge as to reasonableness. An interesting sidelight was the consistency with which a few dealers almost always overpriced their offers. Needless to say, unless these items were desperately needed they were refused.

This paper does not present any statistical comparisons between the TAAB method of acquiring out-of-print books and the method involving the use of a single searcher. In order to achieve a valid comparison with regard to speed of acquisition and to prices, the same list of titles would have to be used in both methods. However, if personal experience leading to definite impressions about both procedures can be the basis of comparison, the comments that fol-

I should like to summarize what seem to be the advantages and the disadvantages of the TAAB method of finding out of print books. In the first place, an appreciable percentage of titles can be secured expeditiously. The fact that within three or four weeks approximately a hundred dealers see the want list assures that action will be prompt. It would seem unlikely that a single searcher could have the clerical help to equal TAAB's performance in this respect.

As has been indicated before, TAAB service, with a competitive quotation system in effect, provides titles on the whole at reasonable prices. It is not a little illuminating to observe the trend of prices on specific titles and it is interesting that often a majority of quotations will be at the lowest figure.

There are certain disadvantages in the

TAAB approach. It might be thought of as an expeditious, intensive, but short-lived method. The quotations come in steadily until the list is covered. Thereafter, practically no further quotations will be received. The order librarian must then re-list the titles not secured either with a single searcher or, after a lapse of time, again with TAAB. This may involve considerable extra clerical work. A single dealer service will usually be a long-time effort and will be clearly preferable in this respect.

During the intensive but short-lived response to a list there is a concentrated work load put upon the order department in coordinating the offers making the decisions on them, and attending to all the clerical details involved. In cases where a particular edition of a book is wanted, it must be ascertained whether the quotation is for the correct edition. Since numerous dealers are involved, accuracy in linking the correct dealer with the specific titles must be observed. Finally, although we did not list many foreign language titles with TAAB. relatively few of the ones we listed were found.

A few suggestions regarding the use of TAAB service may be of value. For most general want lists it would seem that a combination of the use of TAAB, as first, and a single dealer for the remaining titles would be effective. Some libraries might find TAAB useful only for out-of-print titles needed urgently, in which case other desiderata items could be listed with a slower but more persistent service. Also, certain differentials regarding subject matter might be observed. TAAB's performance is undoubtedly best for general, English language material. Lastly, a suggestion would be that more short lists be sent to TAAB rather than fewer long lists. A long list can be broken up and sent at intervals to prevent too continuous a work load due to the intensive short-run response

(Continued on page 40)

Problems in the Application of Uniterm Coordinate Indexing

Dr. Sanford is deputy chief, Technical Library Division, National Security Agency, and Dr. Theriault is chief of the documentation branch.

THE LIBRARY of the National Security Agency has completed the organizational and experimental work necessary for the creation of a large-scale uniterm coordinate index. Production is now on a routine basis. Over 70,000 documents have been cataloged. This report is written at this time to make our experience available to other librarians who may be considering the use of this system.

We wish we could answer all the questions that have been raised about coordinate indexing in the literature. Many earnest librarians with very considerable professional experience have been deeply troubled by its potential pitfalls. Perhaps we have been very lucky. Perhaps the pitfalls will vanish in any other large-scale test. We do not know. We can report only that our system works. We do not know of any other means to gain such tight control of large masses of documents so economically and rapidly.

There have been problems, however; and some of them were formidable. Our version of the uniterm system of coordinate indexing is certainly not the last word in desirable development. It contains some of the whimsical invention and much of the rough-and-ready crudities of Henry Ford's Model "T" automobile. But, like the Model "T," it runs. As will be apparent in the account that follows, we have had to introduce many

adaptations and changes of the system as originally outlined in the literature. Since we were pioneering, matching our wits against the new system day by day has been challenging. We hope that in solving our own problems we have made a contribution to the developing science of documentation.

For any reader unfamiliar with the uniterm system of coordinate indexing, the scheme is conceived as follows: The ideas presented in the title of a document, plus additional ideas embodied in the text if the title is not sufficiently descriptive, are broken up into separate words, dubbed "uniterms." The document is assigned an arbitrary number. A 5" x 8" master index card is prepared for each uniterm, and the number assigned to a document is registered on all of the uniterm cards that describe that document. Thus, the uniterm card bearing the heading CATALOG will have inscribed on it the document number of every report having anything of moment to do with catalogs or cataloging. A document that is a catalog of spare parts for automobile windshield wipers will have its number recorded on each of the following cards: Catalog, Automobile, WINDSHIELD, WIPER, PARTS. To find this document, the above cards are compared. Wherever the identical number appears on two or more cards, that number represents a document wherein the ideas intersect, i.e., coordinate.

We thought our first problem was the creation of a list of these uniterms for our subject matter. Here, however, our experience recommends three immediate departures from the system as pro-

posed by Documentation, Inc.

1. Let the documents themselves generate their own uniterms. Catalog 1,000 documents. They will produce about 1.000 uniterms. Weed this list carefully, combining synonyms. With this core, catalog another 1,000 reports, using the "approved" basic list where possible, and then repeat the weeding operation. Once some 8,000 uniterms have been chosen, the rate of addition falls off very rapidly, even in highly varied subject matter. The curve begins to grow nearly flat when between 40,000 and 50,000 documents have been cataloged. The useful limits of a uniterm vocabulary are so soon reached that above 10,000 terms only highly specific items, such as new trade names and equipment designations, need to be added.

2. Forget all about "free" and "bound" terms as set forth in the literature of the subject. "Bound" terms almost inevitably free themselves sooner or later, and the intermediate step serves only to make extra work. Multiple words, however, should be used for exact description of concepts, wherever the idea ex-

pressed is a unit.

3. From the start, use see and see also references on the headings of uniterm cards, in accordance with standard library practice. We have found no other satisfactory solution for problems of near synonyms, for synonyms-in-some-meanings of words, and for all the other perplexities born of the fact that uniterm coordinate indexing uses the living fabtic of language for its base.

Our next problem was the discovery that we needed to develop satellite indexes around our coordinate index. Here the needs of libraries will no doubt differ, but we soon found that in the coordinate index we were building a heavy-duty machine unsuitable for light work. We decided to employ traditional library methods for all types of document reference questions they served best, and to turn to the coordinate index where traditional methods broke down when laden with the peculiar burdens which documents engender. The combination of old and new methods has turned out to be an unexpectedly harmonious arrangement.

Problems of work flow came next. Our system as it finally evolved represents the solution of a series of problems in practical operation and hence may be of interest. Because the approach lends itself so readily to rapid processing, attention paid to "time and motion" pays large dividends in total production. Our basic requirements perhaps differ little from those of a great many libraries:

A collection of at least 200,000 technical reports and other documents needed improved information control. They were scattered throughout the organization in several dozen informal collections. A good many individual office files also needed to be surveyed. Each collection, small and large, had been organized according to a scheme chosen by its compilers. No professionally built catalogs existed. Large numbers of duplicate copies of reports were known to be wasting file space among various collections. The total number of reports to be processed probably approached one million.

The task was to weed out the duplicates, select items from the remaining originals which were worth keeping, and to create an index for them without assembling a definitive central collection. A central index was desired but a central file could not be contemplated: among the wealth of duplicates, too many items were unique and were required for frequent reference use in the departments then holding them.

Our organization is built on four teams of three members each, with a support group of twelve people located at the central cataloging department. Three teams operate in the "field," visiting any desired component of the agency's organization and cataloging its documents. The fourth, a "home" team, operates in the central department in association with the support group, and is responsible solely for cataloging newly issued reports. Each team has a "leader" who is responsible for its entire, independent operation, including public relations with the people whose files he is organizing. He is also the uniterm cataloger for his team. He is assisted by a descriptive cataloger and by a clerk.

At the beginning of the operation performed on any file drawer of documents, the clerk of the team copies only the titles in informal lists. Once daily he returns to check these against the authority title file in the central catalog depart ment. Duplicates of documents already cataloged are noted. Upon returning to his team, the clerk rubber-stamps these items "Duplicate Copy." Henceforward, these may be destroyed with confidence when no longer needed locally. The remainder are stamped "Record Copy" with a space provided for registering a permanent index number. These originals provide the team with the material for the ensuing day's work.

Because desk space is usually limited in the office being visited, each team is restricted to one typewriter, normally operated by the descriptive cataloger. The descriptive cataloging is performed directly on fanfolds. Because of the total needs of the system, the process is simple and swift, We record (a) title, (b) corporate author, (c) personal author, (d) series number, (e) contract number, if any, (f) collation. No tracings, subject headings, or other timeconsuming notations are required. They are cared for, using simple short cuts, elsewhere in the system.

Document and fanfold are then passed to the team leader, who verifies the accuracy of the descriptive cataloging. He scans, studies, or dissects the document as its importance or difficulty seems to

require, and writes out in longhand in a space provided on the fanfold all the uniterms he believes the document requires for indexing "in depth." This means that he attempts to record all of the subjects concerning which this document could conceivably be useful. Always, if the document concerns some subordinate topic-a part of a larger machine, a step in a process—the next larger concept is set down as the first uniterm. Then come all the words that answer the classic reporter's questions: "Who?" "What?" "Why?" "When?" "Where?" "How?" Then, uniterms to cover any ideas given special treatment in the document or which are important in the conclusions. The team leader is not afraid to scribble out a long list. He knows (a) that the ensuing processes in indexing these terms into the system are so economical of time that it is desirable to err on the side of over-completeness, and (b) that on any week's work his lists of uniterms will average nine terms per document.

Having finished his list, he examines it critically. The best test we have found for good uniterming is this: Do the words, read consecutively, come close to forming a complete and intelligible sentence? If so, no essential has probably been omitted. Next question: Do the terms cover all the ideas for which this document could be wanted? Here, of course, the human factor enters heavily the cataloger's knowledge, background, and plain brain power. We know of no other system, however, where overly-careful and too-detailed indexing can be so cheerfully applauded by top management. It is certainly true that perfectly satisfactory indexing can be performed by catalogers with much inferior technical subject background than is required in any taxonomic system of classification.

The team leader's final chore is to assign a permanent accession number to the document and to record it on both document and fanfold. He chooses this number from a block of "open" numbers currently assigned for his use. When the document is refiled by his clerk, his part of the operation is completed.

The routine in the central office employs copies of the fanfolds for various needs. The original and one carbon go first to the uniterm control officer, who must approve all new terms, adjust cross references, and eliminate useless synonyms. The original then goes to the clerk who types the Multilith stencils, and finally to the desk where the biweekly document accessions list is prepared. The carbon is routed to the posting clerks. The second carbon is filed immediately in the title authority file; the third in the accession-number file until replaced by the permanent printed card.

For economy, stencils are cut with a micro-clite typewriter on commercially available Multilith mats of narrow gauge having perforated sprocket edges which prevent slipping, since the typewriter is equipped (at very small cost) with sprocket guides above the platen. When these sprocket edges are torn off along the perforation, the stencil is the correct width to print 3" x 5" cards on long sheets. The press will accommodate two of these masters side by side so that press time is reduced to half. The stencils are pre-printed, again for economy, with whatever legends are standard for this library's cards. The finished sheets of printed cards, being completely uniform in register, can be machine cut, ready for filing. Satellite files are maintained by title, corporate author, personal author, series number, and contract number.

The "posting" operation, as the process of recording document numbers on uniterm cards is called, caused real trouble. Here lay the most formidable problem we encountered in the application of coordinate indexing. The process seems simple enough, but once it is begun difficulties multiply. Each card must

be pulled, recorded upon, and refiled. The work is boring and fatiguing. Errors are easy to make and difficult to detect. Workers get in each other's way. While posting is going on, any reference use of the index usually means that one or the other operation must stop. Posting was hopelessly slow in relation to the smoothness and speed displayed in all other steps. It is not an exaggeration to say that this bottleneck threatened the collapse of our entire system.

The solution proved to be a simple one. We installed an IBM punch in the catalog department and equipped it with two standard "programs." A document number punched (and verified) on the first card is automatically reproduced on all ensuing cards until the operator wishes to change it. In changing from one document number to the next higher one, the operator touches only the final digit keys. One typist working two hours a day can keep up with the punching from all fanfolds generated by all four teams working at full production. At the end of each week the accumulated IBM cards are dropped into a machine

Now the posting operation is a quite different matter. Our coordinate index is housed in the familiar library "Kardex" type file. Beginning with the first one required, the poster withdraws one tray at a time, disturbing reference workers and other posters no more than does any other catalog department worker when she removes a drawer from the main card catalog in any library to file a new card. On the uniterm card for AUTOMO-BILE this clerk posts the number for the document on windshield wipers, and all others concerned with automobiles that the library has cataloged that week. The IBM sorting machine has even placed all the automobile entries in correct numerical order. The posting operation is swift and highly accurate.

We had our fingers crossed concerning the reaction of our library users toward the coordinate index, but we soon discovered that our misgivings were groundless. Unless this agency's employees are miraculously different from the general public, no one else needs to worry either. It is true, however, that the most enthusiastic response has been from our engineers and others with training in some academic discipline. Use of the system numbers several hun-

dred questions each week.

On the premise that our customers could not care less whether the answer to their reference obestion came from a book, a serial, c; a document, we placed the coordinate index and its satellite catalogs tight beside the library card entalog. All who will may use them. Habitral library customers almost invariably prefer to consult the coordinate ind a unaided after their first five-minare indoctrusation course in the system. Reference personnel are available, of course, to help any newcomer, or anyone else with a problem. We think it is sound public relations to offer to help everyone. Everyone, including the reference staff, is taught to think of the coordinate index as his heavy artillery. Where author, title, or serial number of a document is known, the satellite catalogs provide quick reference.

Much has been printed speculating on the amount of "noise" a large installation of coordinate indexing would produce; that is, the number of false coordinations of the man-bites-dog variety which would interfere with effective research work. The gloomy predictions have not been borne out by our year of operational use of the system. Now, it may well be that there are subject fields in which "false hits" would embarrass the reference librarian. We can only report that, in our library, a little care and forethought in the catalog department has kept the number of false coordinations so small, in our subject matter, that the annoyance is negligible. We have found that: (a) the more specific

the subject field we are cataloging the tighter is the information control gained; (b) the more specific the uniterming the fewer are the false hits created; (c) skillful uniterming is a logical fractionating process, not a mere slicing of a document's title into separate words -this is especially true in the exact sciences; (d) wherever the man-bitesdog difficulty can be foreseen by a cataloger, the addition of a simple delta sign after the index word will signal the reference user which one is the correct reading, e.g., GERMANYA IMPORTS-France means only German imports from France, not French imports from Germany. We have used these "delta flags" freely for words which cause us trouble. Their total number, however, has remained small.

There are, no doubt, more problems which we shall encounter as time goes on, but these are all the difficulties which we have met so far. A potential problem, that of an unwieldy pile up of numbers on "popular" uniterms, was solved just as it arose with us by a timely paper from the Office of Basic Instrumentation of the U. S. National Bureau of Standards. On the question of "browsability" of the system we refer the reader to the excellent discussion of "browsability and suggestability" in the same paper. In their conclusions we heartily concur.

We have discovered no completely valid method to test the reliability, or the percentage of completeness of retrieval of information, of our index. We can testify that to date it has never failed to produce any "known" document. The expressions of pleasure we receive concerning the quality of our reference service leads us to conclude that the percentage of retrieval is high, perhaps even very high.

¹ William Wildback, and others, "Tocumentation in Instrumentation," American Documentation, V (1954), 223-87. This article contains a useful bibliography on documentation experiments reported abroad. We employ standard uniterm eards for all except the most heavily used terms.

Proposed Expansion of the Library of Congress Catalog—Books: Authors Into a Current National Union Catalog, 1956

The following four papers were presented at the meeting of the ALA Resources Board, Philadelphia, Pa., July 4, 1955. Dr. Frederick H. Wagman, University of Michigan Library, presided.

By CHARLES W. DAVID

Background and Significance of the Proposal

Dr. David is director of a new research library for the Longwood Foundation, E. I. duPont de Nemours and Company.

T THE ANNUAL Conference of the Ameri-A can Library Association which was held in Los Angeles in the early summer of 1953. I appeared before an open meeting of the Board on Resources and presented a paper on "The Reproduction of the National Union Catalog."1 I was then working as the chairman of a subcommittee of the Board on Resources which had had this matter under consideration months, had held a number of meetings on the subject, and had tormented the Library of Congress with repeated requests for study and experimentation in an effort to find a way to bring about the publication in good readable form of our great national bibliographical instrument, so that it could be made generally available on the shelves of our research libraries.

I mention these things in order to indicate that I may perhaps claim to be something of a veteran in the campaign to provide research libraries with a convenient, readily usable copy of our National Union Catalog.

But to confess the truth, the Los Angeles

paper was no outstanding success, though it did. I think, set forth simply and honestly the record of a considerable effort directed towards a very desirable objective, which ended in failure. There were several good reasons for the failure. Due, among other things, to the refusal of Congress to provide adequate sustenance, the existing Union Catalog was not fit to be published without a gigantic effort of filing, retyping, and editing. Also there were strong reasons against publishing until a great and expensive further effort had been made to bring the catalog more nearly to completion; and the evidence which has accumulated since then has certainly confirmed this view. Finally, with the magnitude of the enterprise and with the rising costs of all bibliographical work and of publishing, we found our estimates of the total necessary outlay rising to between four and a half and five million dollars; and nobody had the courage to contemplate the possibility of any such burden as that being borne, even cooperatively and collectively, by our research libraries.

Yet in spite of the discouragement of such figures. I said in a final paragraph, "Experienced librarians will hardly be willing to write finis upon this project and condemn it to the musty files of the forgotten." Rather I suggested that the work of the subcommittee "should not... be regarded

^{*} COLLEGE AND RESEARCH LINUXPIER, XV (1954), 20, 56.

as having recorded a failure, but rather as having established a bench-mark for the guidance of more successful explorers and surveyors of a later time." Today we are met to take fresh encouragement from the fact that the effort which culminated in 1953 did not end in final defeat and to take account of the fact that substantial progress has been made, particularly along one line of attack.

I have not made the necessary effort to determine just where and when and by whom the proposal was first made that the Library of Congress Catalog-Books: Authors be expanded into a current national union catalog. The Books: Authors Catalog itself stems from the earlier massive Catalog of Books Represented by Library of Congress Printed Cards, which was promoted and sponsored by the Association of Research Libraries. In the course of the investigation and the discussions which led the Library of Congress to the decision in 1946 to publish its catalog currently and cumulatively in the form which has now come to be called the Books: Authors Catalog, the possibility of a later expansion of this instrument into a national union catalog was repeatedly considered and came to be regarded as an important desideratum. It was discussed at some length in a paper by C. Sumner Spalding which was read at the same meeting of the Board on Resources in Los Angeles to which reference has already been made. But I think it was not until somewhat later than this that research librarians began to be conscious of the elfects which such an expansion of the Books: Authors Catalog might have on the Union Catalog problem as a whole.

It it should prove to be feasible financially and practically to expand the Books: Author Catalog into a really successful current national union catalog—with proper editing, without any cumbersome backlog of unfiled entries, without any undue delays in reporting—then would not a great burden be lifted off the existing National Union Catalog staff? Would it not then be possible to cease filing current cards into the existing catalog, as of a given "cut-off" date, thus bringing to an end (or nearly to an end) its seemingly endless expansion? If such should prove to be the case, then might

there not be an end of the serious budgetary inadequacy of the Union Catalog Division at the Library of Congress, and might not the staff find itself in a position to devote its resources and its time and energy much more largely to the work of filing the backlog of accumulated cards, to editing and retyping unsatisfactory cards, and perhaps most important of all, to bringing the catalog more nearly to completion. Thus would some of the obstacles to publication which have been noted above gradually be removed -with the hoped-for result that the catalog might ultimately be published and made widely available. Such reasoning had a very strong two-fold appeal. First, it offered the almost immediate hope of a published current national union catalog, which within a few years would inevitably grow into something retrospectively important. Second, it offered the hope of lifting a great burden of frustration from the shouders of the existing Union Catalog staff and of preparing the way for the ultimate publication of that great bibliographical instrument.

So far as I am aware, this line of reasoning was first developed in an informal conversation late one evening in a hotel lobby in Minneapolis during the ALA Annual Conference a year ago. It was further discussed and developed in a meeting of the Board on Resources a day or two later; and since then it has been under active consideration by a new subcommittee of the board, of which Frederick H. Wagman is chairman, by the Library of Congress, and by the board itself.

The subcommittee held long meetings at the Library of Congress in October of 1954 and in January of the present year, and it has laid on the Library of Congress a tremendous burden of investigation, calculation, and planning. At the January meeting of the subcommittee the Library of Congress presented detailed studies of alternative plans, together with some \$2 pages of statistical tables showing the probable number of cards to be handled and giving estimates of subscription costs. After these difficult data had been examined with as much understanding as the members of the subcommittee could bring to bear upon them, the general outline of the plan which is today before us was unanimously approved. Since then the plan has been studied further by the Library of Congress and by the Board of Resources; it has been formally approved in principle by the board and by the Association of Research Libraries, and it has been laid before many librarians here present in writing, together with a request that they indicate their willingness to have the institutions which they serve subscribe to a considerable number of copies of the expanded catalog, thus offering the assurance of financial feasibility.

The plan itself, together with reasons for its adoption, will be presented to you in some detail in the following paper by the chief of the Union Catalog Division of the Library of Congress. The remainder of my assignment is to express my convictions about the significance of the proposed ex-

panded catalog.

Here I think I had better begin by making the honest confession that I am an avowed advocate of this project rather than an impartial judge. It is true that I have had to learn some degree of moderation since in my first enthusiasm over the possibilities of modern reproduction techniques I shared, a good many years ago, in the authorship of an article which seriously proposed the compilation of a world thesaurus;2 but I still hold with deep conviction to the view that American scholarship, American librarianship, and the national interest require that we have in our research libraries a welledited, conveniently usable, national union catalog which will reveal, with locations, substantially our total national library resources. The efforts which have been made in recent years, mainly under the sponsorship of the Board on Resources, have seemed to demonstrate that such a union catalog, however desirable, is not presently a practical possibility. But the more limited project which is before us today does seem to me to be eminently practical and possible and to constitute a great forward step in the right direction

The Library of Congress Catalog—Books: Authors when first proposed was, I think, viewed by a good many librarians with real misgivings, but it has succeeded beyond expectations and has now come to be regarded as an indispensable tool in both the technical and the service divisions of a great many libraries, even fairly small ones. I am convinced that the proposed expanded catalog, because of its greater riches, will prove to be even more indispensable in pretty nearly all the connections in which the present Books: Authors Catalog is used.

Moreover, as in the case of the present Books: Authors Catalog, currency, especially because of the regular and systematic cumulations, soon stretches out into the long range, and so it will be with the proposed

expanded catalog.

The statistics of the experience of union catalogs on cards, both national and regional, on which I would like to lay hands at this moment appear for the most part not to be available; but the Union Catalog Division of the Library of Congress has been able to provide me with partial data which seem to me to be worthy of attention. Leaving out of account the unrecorded searches of individual scholars who visited the Union Catalog and used it personally, it appears that during the first quarter of 1954 a total of 3,293 requests for monographs were received and searched by the Union Catalog. Of these 13.5% bore imprint dates of the 15-year period 1940 through 1954; 23.5%. imprint dates of the 20-year period 1920 through 1939; and 11.5%, imprint dates of the 20-year period 1900 through 1919. The total for the 55 years 1900 through 1954 was therefore 48.5%. The staff of the Union Catalog Division believes that these statistics, though obviously pretty limited and taking no account of the inquiries of individual searchers outside the Union Catalog staff, are nevertheless fairly representative. The broad conclusion would therefore seem to he that about one half of the inquiries made at the Union Catalog in Washington are for items published during this present century

I think it is fair to observe, however, that the kind of inquiries which one commonly takes the trouble to send or carry to Washington are likely to be the difficult ones for items bearing the older imprint dates. If we had a satisfactory published union catalog conveniently on our shelves, I am convinced that the use of it would be for the searching of recent imprints much more largely than

^{1&}quot;A Cumulative World Thesaurus," The Journal of Documentation, 111, (1947), 45-45.

the Washington experience examined above would lead one to expect. This view is confirmed by the staff of the Philadelphia Regional Union Catalogue. While they have not compiled statistics on this point, it is their unanimous impression that the inquiries with which they have to deal are much more preponderantly for imprints of relatively recent date. To me it seems probable that the Philadelphia experience is a better indicator than that of Washington as to what we might expect as to the use of the proposed expanded Books: Authors Catalog. I believe in short that, if the proposed new venture succeeds, most of us will be astonished at the rapidity with which our new tool takes on great retrospective importance and provides convenient answers to a great number of our questions.

And as for the existing National Union Catalog on cards, which will, I am convinced, be greatly assisted by the launching of the proposed new current catalog, we are not yet in despair of ultimate publication, as I hope other speakers on this program will

presently convince us.

Speaking now from the viewpoint of a large university or research library, what claims can I properly make for the importance and the usefulness of the proposed expansion of the Books: Authors Catalog into a current, cumulative national union catalog? In order to clarify my thinking on this subject. I have conferred about the project with a good many of the members of my staff whose experience should lend weight to their judgment. Their comments have been unanimously favorable. In the acquisitions department I have been assured that the expanded catalog would be of great assistance to the searchers in their effort to establish correct entries and to the department as a whole in its effort to form an idea of the contents of a proposed purchase and so reach a sound decision as to whether to proceed with the purchase or not. In the cataloging department there was equal enthusiasm. It was felt that the new tool would be of much value in establishing author identity for both current and non-current material, that it would greatly lighten the burden of searching, and that it would be of much help in dealing with the difficult subject of corporate headings. We have in

our library an important enterprise of cata log revision which stems from the bad practices of former generations. Here again I received assurance from the catalog reviser that the new instrument would be of much assistance, particularly because of the record it would supply of the practices of other institutions. The reference department was equally emphatic. It was particularly noted that the expanded catalog would supply much bibliographical information on authors which is elsewhere far more difficult to come by, that it would be of great assistance in the handling of the growing traffic in interlibrary loans, and that it would constitute a reference tool of great importance not only for librarians but for the faculty and students which we serve.

On reflection I wonder why I have taken the trouble to make these inquiries among the members of my staff. American librarianship has been firmly committed to the concept and to the cooperative support of the union catalog idea for several decades. Resolutions calling for the "completion" of the National Union Catalog have been numerous and they have been unchallenged. More recently the demand has been growing for the National Union Catalog not only to be "completed" but to be properly edited and legibly published for wide distribution and use. The proposed expansion of the Books: Authors Catalog into a current cumulative union catalog will certainly not wholly meet these demands, but my own conviction is that it will constitute so great a forward step towards the desired goal that it ought hardly to be necessary to argue the case in its favor, provided a plan can be devised which offers good hope of its being financially self-supporting. And here I would also point out that past experience with such cooperative enterprises seems to indicate that once they have been got under way our capacity to sustain them is likely to be greater than was at first thought possible

Lest what I have so far said should seem to some of you an unblushing piece of promotion, let me add a final word of caution. I will not claim that the plan as now Jormulated and about to be laid before you is beyond criticism or that it will give us truly the current union catalog of our dreams. There will inevitably be blemishes and in-

comistencies in it. There may be difficulties about prompt reporting and editing. More serious, as it seems to me, may be the inadequacy of the reporting by cooperating libraries across the country. In the initial stages I am convinced that the catalog's coverage of our total resources and its representation of their geographical distribution

will be inadequate. But here I believe that there is need for an act of courage and faith. Just as in the matter of financing, so here in the matter of coverage and geographical distribution, if we can get the enterprise under way, I believe that improvements can be made and the blemishes be removed as we go forward.

By GEORGE A. SCHWEGMANN, JR. and ROBERT D. STEVENS

The Proposal for a Current Author Catalog of American Library Resources

Mr. Schwegmann is chief and Mr. Stevens is assistant chief of the Union Catalog Division, Library of Congress.

S YOU HAVE HEARD from the preceding A speaker, the proposal of the ALA Board on Resources that the Library of Congress Catalog-Books: Authors be expanded to include the catalog entries of other libraries for 1956 and later imprints is the fruition of several decades of serious consideration of the problem of providing librarians and scholars with a printed and widely distributed record of current American library resources and represents the first concrete step toward publication of the National Union Catalog in book form. Because of the extreme importance of such a published record, the Library of Congress welcomed the suggestion of the board that a questionnaire be sent to all present subscribers to Books; Authors asking if they would continue their subscriptions to the Catalog if the recommended change in scope, which would entail an increase in subscription price, was adopted.

The recommendation of the board was made on February 1, 1955. On April 18, 1955, letters describing the project and questionnaires were sent to 650 subscribers. By June 15 responses were received from 515 subscribers indicating that they would subscribe to a minimum of 700 copies.

The Responses to the Questionnaire

The promptness of answer and the high percentage of responses to the questionnaire were convincing evidence of the widespread interest in this proposal. Although the questionnaire did not specifically provide for comments, many of the 451 librarians who answered in the affirmative took the opportunity to praise this step. In this group of affirmative answers, 421 librarians indicated they would continue their subscriptions at the present level, and 30 were enthusiastic enough about this cooperative venture to indicate that they would subscribe to extra copies if necessary to assure its financial success. Some of the 64 respondents who indicated that they would cancel or decrease the number of their subscriptions also commented on the proposal. In the main the adverse comments fall into three categories: (1) an objection to the increase in price in view of a limited budget for the purchase of books: (2) the opinion that cards other than Library of Congress printed cards would be of no use to the particular library; and (3) a fear that the increased size of the catalog would result in a slowed-down publication schedule. On this last point we hasten to reassure you. The increase in size of the catalog will not change the editorial deadlines nor will it mean that the issues once edited will be any longer at the printers than at present.

In summary, 75% of the present subscribers to the Library of Congress Catalog have responded to the questionnaire and nearly 90% of the responses have been favorable.

Historical Background

Dr. David's résumé of the previous discussions and proposals makes it clear that prior to last fall when the presently constituted Committee on the Union Catalog of the ALA Board on Resources first met, all aspects of the problem of publication of the National Union Catalog had been thoroughly discussed and all that was lacking was a catalytic agent to prompt action. The catalytic element introduced late in 1954 was the concept that a start toward solving the problem of publication of the National Union Catalog might best be made by first publishing a current supplement to a projected main work which could be published when feasible in the future. This is not to say that no thought had previously been given to the possibility of expanding the Library of Congress Catalog by the inclusion of catalog cards prepared by other libraries, for, as many present will remember, this possibility was discussed by C. Sumner Spalding at an open meeting of the ALA Board on Resources on June 25, 1953,1 It was in October 1954, however, that Dr. Frederick H. Wagman first introduced the concept that publication in the Library of Congress Catalog of all information about current imprints would relieve the staff of the National Union Catalog of the considerable burden of arranging, filing, maintaining, and answering reference queries about current books. In effect, Dr. Wagman pointed out, relief from these duties would gradually increase the proportion of the staff of the National Union Catalog left free to concentrate on the problems of completing, editing, and preparing for eventual publication of the National Union Catalog record of holdings of books published prior to 1956 and at the same time would make available a reference tool for current imprints of considerable immediate value.

It is expected that this step will relieve

the pressure on the staff of the Union Catalog Division in two ways: first, on the basis of detailed statistical studies it can be predicted that by 1958 the division will find its arranging and filing operations reduced by at least 200,000 cards per year or by onethird of the present work load; second, it is anticipated that publication of location information about current imprints will lighten the burden of searching since samplings of requests to the division have indicated that as high as 20% of the searching load is for imprints of the past ten years. Provided the staff of the Union Catalog Division can be maintained at its present level, relief from these duties should leave available man-hours urgently needed for the completion and editing of the older portion of the National Union Catalog.

The first step which led to the present proposal was taken on October 20, 1954, when the ALA Board on Resources Committee on the Union Catalog, having reviewed its previous decision not to recommend publication of the National Union Catalog in microcard or microprint form, requested the Library of Congress to provide it with detailed information concerning the cost of preparing and publishing a Current Author Catalog of American Library Resources.

The Union Catalog Division possessed basic data in the form of statistics of receipts of cards for current imprints since 1952. The effort of translating these statistics into estimates of cost for publishing current imprints in alternative formats required several hundred hours of staff time of members of the Processing Department. By the time of the next meeting of the Committee on January 14, 1955, the staff of the Library of Congress had prepared and distributed to the committee members a working paper2 consisting of 24 pages of text and 32 pages of statistical tables.

After the committee's meeting of January 14, 1955, a summary of the decisions taken to date was sent for information to members of the Board on Resources and to all mem-

¹C. Sumner Spalding, "Library of Congress Book Catalogs: Proposed Expansion into Current Author and Subject Catalogs of American Library Resources," COLLEGE AND RESEARCH LIBRARIES, XV (1954), 15-22.

^{*}The working paper bore the heading "ALA Board on Resources Committee on the National Union Catalog Proposal to Expand the L.C. Author. Catalog (sic.) to Include Union Catalog Cards for Entries for 1982 and Post-1982 Imprints. December 27, 1984.

bers of the Association of Research Libraries.3

The Alternative Proposals Considered

Once the decision had been reached that a book catalog printed by conventional photo-offset techniques would provide the most usable form of publication and with the committee unanimously agreed that the most feasible approach to the matter would be to concentrate on the problem of current additions to the National Union Catalog, it remained only to identify, define, and compare alternatives as to the beginning imprint date of works to be represented, pattern of issuance, and types of materials to be included. With the working paper in hand the committee was able to base its ultimate recommendations on factors both of usefulness and cost to the consumer.

The years from 1952 through 1956 were considered as alternative beginning imprint dates for works to be represented in the Catalog. The idea of using 1952 as the beginning imprint date was considered simply because it was in that year that the Union Catalog Division had started to segregate and file separately cards for current imprints as they were received. Serious consideration was given to beginning with 1953 imprints on the ground that use of this year as a cutoff date would have made the 1953-1957 quinquennial cumulation of Books: Authors a complete, published union catalog for current imprints cataloged during the period. The difficulty with either of these dates was financial since, if 1953 were used there would have been an estimated 440,000 main entries, added entries, and cross references to be edited, retyped, and printed during 1956 and 1957. The cost of preparing these entries accumulated over a period of five years would have had to be met from the 1956 and 1957 subscription fees which would have come to \$350 per year for each of the two years. Under normal circumstances, of course, the cost of preparing entries for any five-year period will be spread over the subscription fees for the entire five years. These same considerations of cost applied, though in lesser degree, to any of the years between 1953 and 1956. On the basis of these cost figures the committee concluded that it would be best to get a fresh start in 1956 with the cataloging reports for current imprints. The use of 1956 as a beginning imprint date as finally decided will mean that approximately 112,000 entries from sources other than Library of Congress printed cards and an estimated 64,000 reports of additional locations will be prepared and published during the biennium. The cost under this proposal will amount to \$170 per year for each subscription during 1956 and 1957.

The question of pattern of publication, that is, of frequency of issue, of frequency of cumulation, and of whether entries from all libraries would be included in all issues, was also decided on the basis of cost and convenience to the users. Basically, it was decided that it will be essential to retain the present pattern of publication and cumulation so far as the Library of Congress portion of the catalog is concerned on the grounds that subscribers have come to depend on monthly issues for speed in securing cataloging and card ordering information and on frequent cumulations for convenience of use. The question then remained of whether cards and reports of holdings from libraries other than the Library of Congress would be included in all issues or only in the larger cumulations.

Six alternative patterns of publication were discussed and evaluated. The first plan discussed was that of adding entries and reports of holdings from libraries other than the Library of Congress only to the annual and quinquennial cumulations and omitting them entirely from the monthly and quarterly issues. The savings under this plan would have been in printing costs only since it will be necessary to prepare and edit copy furnished by other libraries for inclusion in the annual volumes. These potential savings of printing costs would have amounted to a maximum of \$15 per subscription.

The second plan considered and that finally adopted was to continue the present pattern of publication of Library of Congress entries and to add to all issues cards from other libraries, representing works published in 1956 and later as they are received

^{1 &}quot;Proposal to Expand the Library of Congress Catalog Books: Authors to Include National Union Catalog Cards Representing Imprints of 1986 and Later," with accompanying letter dated January 21, 1955, 2 pp. processed.

by the National Union Catalog. Under this plan the pattern of issuance and contents of the issues of the catalog will be as follows:

- I. Monthly issues: Library of Congress printed cards and National Union Catalog cards for the current and past two imprint years. (In 1956 and 1957 the National Union Catalog cards will be for only 1956 and 1957 imprints but in 1960, for example, the monthly issues will contain Union Catalog cards for 1958, 1959, and 1960 imprints.)
- Quarterly, annual, and quinquennial issues: Library of Congress printed cards for all imprint dates and National Union Catalog cards for imprints of 1956 and later.
- 3. Locations of additional copies will be shown in all issues, but main entries will not be reprinted outside of the normal pattern of cumulation simply to show reports of holdings received since publication of the entry. If a main entry had appeared in the January-March quarterly cumulation, reports of additional locations received in April and May or later would be held for printing when the appropriate main entry is next cumulated in the annual volume.

The estimated cost of individual annual subscriptions under this plan is \$170 during 1956 and 1957 and \$245 annually in later years.

The third plan contemplated dropping Library of Congress cards for imprints earlier than 1956 from the monthly, quarterly, and annual issues and including Library of Congress cards for all imprints only in the quinquennial cumulations. This plan would have reduced the annual subscription by \$25 but would have seriously impaired the usefulness of the catalog. Plans 4, 5, and 6 represented less acceptable variations of Plan 2 and need not be discussed in detail. The individual annual subscription costs during 1956 and 1957 under any of the plans considered would have been in the narrow range of \$145-\$175.

Under the plan of publication adopted, Library of Congress main entries, added entries, and cross references will be included at approximately the present rate of 120,000 per year while similar entries from other libraries will be included at the rate of 31,000 during the first year and increased to 130,000 or more entries per year during the 1960's.

The estimates of the number of cards for imprints of 1956 and later to be received by the National Union Catalog over the next decade and a half are based on a strict accounting of the cards received for 1952 and later imprints and on extensive samplings of current receipts of cards representing earlier imprints. These figures formed the basis for all estimates of cost; they are as accurate as we can make them, but they are subject to change as the size of cataloging staffs, cataloging policies, or acquisitions/ policies of the contributing libraries andy change. We venture to predict that the publication of cards from other libraries may encourage additional libraries to contribute, which in turn would lead to an upward revision of the present estimates.

Other lesser decisions as to scope of the catalog concerned a number of types of materials. For the present, entries for serial publications will be included-this will represent some duplication with New Serial Titles, but it should be remembered that these will be full cataloging entries and not the abbreviated accessions list type of entry found in New Serial Titles. Entries in non-Roman alphabets, except those on Library of Congress printed cards, will not be included because of technical difficulties of transliteration or reproduction. Such entries in the non-Roman alphabets as are received by the National Union Catalog will be sent as heretofore to the special language union catalogs in the Library of Congress for retention and possible later publication. In the case of the Cyrillic alphabet material there is the possibility that there will be a published union catalog sometime in 1956. with the Monthly List of Russian Accessions serving as a kind of supplement.

The problem of what limitations should be placed on the number of locations reported for any one item is a thorny one for which only a temporary solution has been reached. The present plan is to publish all reports of locations received except those for United States government publications distributed to depository libraries, for United Nations publications which are also widely held by depositories, and for the publications of the states of the United States which may normally be found in the respective state libraries. The question of how many locations should be shown for commonplace books in the American book trade has not yet been fully answered, but we would do well at this time to take steps to assure that adequate reporting is obtained from all regions of the United States. This is a question on which advice and help from the library profession at large will be needed. David and Hirsch, in a recent articles in Library Trends, pointed out present deficiencies in the National Union Catalog record of book holdings in several regions, but in connection with any attempt to assure full regional coverage the cost of handling the increased number of reports must always be kept in mind.

The editorial policy to be applied to the entries supplied by other libraries may be stated briefly. Wherever a Library of Congress printed card is available it will be used. If an entry is first furnished by another library and a Library of Congress printed card becomes available the Library of Congress card will be substituted in the next issue of the Catalog. If the entry is not the same a cross reference will be provided. Entries from other libraries will be searched in the Library of Congress official catalog and edited for consistency in form of main and added entries. All other information on the card will be printed in the catalog as supplied by the contributing library. No decision as to the inclusion of class and book numbers supplied by other libraries has yet been reached.

The entries from other libraries will be retyped on Coxhead composing machines or other copying equipment in a type face and format similar to that of Library of Congress printed cards. As a result, except for the addition of location symbols, the printed catalog will have the same typographical appearance as the present Books: Authors.

The Basis for Pricing the Current Author Catalog of American Library Resources

The task of estimating the cost of the

expanded catalog was tedious but clear-cut enough once the policy decisions mentioned above had been made. The operations necessary to the receipt, segregation, checking, filing, editing, and preparation of copy for printing were listed step by step in minute detail. The number of man-hours necessary to accomplish the operations was determined by applying the production rates obtaining for similar tasks now performed in the various divisions of the Processing Department of the Library of Congress. With these figures in hand it was possible to arrive at staffing requirements. Estimates of the proper pay grades and valaries were based on those for comparable positions in the Library of Congress. Figures on printing costs were based on those for the present Library of Congress Catalog for which we have statistics going back to 1948 on the average number of entries per page and the actual charges for the printing and binding of the monthly, quarterly, and annual issues. The above cost estimates were totaled and the amount of 10% was added as required by the Act of June 28, 1902, which makes it mandatory that card indexes and the other publications of the Library of Congress be sold at cost plus 10%. The annual subscription rate during each five-year period was then arrived at by averaging annual costs for the period and dividing by the anticipated number of subscribers. Since 1956 and 1957 are the last two years of a quinquennial period the total costs for these two years were averaged at the rate of \$170. Similarly, the rate of \$245 per year was established for subscriptions after 1957. The projected subscription rates were worked out as carefully as possible and we feel that these estimated subscription rates will stand up unless further affected by variables over which we have no control, such as increased salary and printing costs or a considerable increase in the number of entries sent by contributing libraries.

Several of the respondents to the questionnaire have asked if there would be a reduction in price for copies beyond the first purchased by any single subscriber as at present. Other libraries have asked why a service basis for subscription charges would not be possible. Aside from the fact that we do not believe that the Library of Congress

^{*}Charles W. David and Rudolf Hirsch, "Cooperation and Planning from the Regional Viewpoint," Library Trends, 111 (1955), 356-375.

could legally sell this catalog on a service basis, the plain facts are that a service basis charge is to the advantage of the smaller libraries while the larger libraries would prefer to see a reduction in charge for copies beyond the first. The present decision of the Library of Congress to charge the same price for additional subscriptions results from the fact that we are not aware of any feasible alternative which would provide the necessary funds and it actually tends to favor the smaller libraries which take only one copy because under the proposed price schedule those libraries which subscribe to multiple copies will bear an increased proportion of the cost. For example, a large library now paying \$200 for three subscriptions to all issues of Books: Authors will pay \$510 for three copies of the new catalog. This is a 150% increase in cost as opposed to the 70% increase in cost to the smaller institution subscribing to only a single copy. However, even at \$510 or \$735 the large library will be spending less than it would if it were to undertake to file and maintain a depository set of Library of Congress cards or a file of proof sheet entries. This pricing policy is in effect a reversal of the present policy under which the additional copies are sold at half the price of the first copy, but it will be recalled that this pricing policy was adopted only after the financial success of the Library of Congress Catalog was as-

As to the relative benefits to be gained from the catalog by the smaller libraries, we think it safe to say that benefits will not be so much a function of size of the institution as of the imagination and resourcefulness of the librarians who will use this tool. The price of a single subscription which amounts to only 47 cents a day during the first two years and to 67 cents per day thereafter is a small price indeed to pay for the most comprehensive bibliographical service that the world has ever known.

The Implications of the Publication of the Current Author Catalog of American Library Resources

We are convinced, as are the members of the committee, that the decision at this time to publish the proposed expanded catalog beginning in January 1956 is comparable in importance to the decision that was made in 1901 to distribute Library of Congress printed catalog cards on a wide basis. Just as the 1901 decision widened the horizons of American librarianship by making readily available in many locations through depository catalogs and otherwise information about the resources of a single great library, the present decision will broaden horizons by disseminating information about the resources of the major libraries of North America. The full potentialities of this new catalog remain to be discovered and exploited. The most we can do now is to predict that the availability of this tool will radically change some of the traditional patterns of American librarianship. In the field of interlibrary lending we may expect to see a shift from the present burden on a few of the largest libraries to a more equitable distribution of the lending burden. The present trend toward borrowing closer at home, which depends now on the information furnished by regional union catalogs where they are available, will undoubtedly be intensified. Moreover, since information about the location of various works will be readily available, it seems probable that the catalog will be used more and more as the basis for the regional or national planning of acquisitions. Certainly the librarian of the future who is considering the acquisition of an expensive work will consult the printed catalog to determine whether a copy is already close at hand. The ready availability of a mass of bibliographical information should be reflected in lowered costs of acquisition, cataloging, and reference work. As a bibliographical tool the catalog will be of great value from the very beginning and as the years go on its value will steadily increase because the complete literary output of most of the authors of the latter half of the twentieth century will be brought together in it.

The Need for an Advasory Committee

The importance of the step we would take in publishing this catalog which will affect every aspect of American library economy makes it imperative that it be made as useful a tool as is possible. It is abundantly clear that there are many problems yet to be settled and that the Library of Congress

will need a great deal of cooperation and advice in carrying out this enterprise. For this reason we are asking the Board on Resources to establish an advisory committee to aid us in reaching the decisions that must be made. The Library of Congress has found the advice of the Joint Committee on the Union List of Serials extremely helpful in its efforts to improve the publication New Serial Titles. Similarly, another committee would help us to make this current author catalog of North American library resources a work of maximum usefulness to all users.

The widespread acceptance of the proposal that we have outlined is as gratifying to the administrative officers of the Library of Congress as it is to the Committee on the Union Catalog of the ALA Board on Resources and gives us confidence to pursue the planning to commence expansion in January 1956 if the Board on Resources will recommend that we do so.

We might add, that the sentiment of the Association of Research Libraries in connection with the matters under discussion here are reflected in the text of the following two actions which were taken by the Association on January 31, 1955:

1. "That the ARL endorse in principle the proposal to expand the Library of Con-

gress Catalog-Books: Authors."

 "That the ARL urge the Library of Congress to proceed, after having expanded the Library of Congress Catalog, to consider the possibility of reproducing the basic Union Catalog in photo-offset form, with such re-editing and re-typing of titles as necessary."

By HELEN M. BROWN

The Proposal from the College Library Viewpoint

Miss Brown is librarian, Wellesley College.

TOLLEGE LIBRARIANS have been greatly dis-, turbed by the treatment of the college library in the 1952 Report of the Commission on Financing Higher Education. In attempting to suggest possible economies for the admittedly financially hard-pressed institutions the report states that general agreement was found that a "good" liberal arts college ought to operate with a book collection of under 100,000 volumes, many of which would be duplicates. What has troubled the college librarians is the apparent negation of the essential differences among college libraries shaped as they are by the programs of their parent institutions, The recognition of these differences is pertinent to this discussion. Let us pose the hypothetical question, "Why should the college librarian whose budget and building needs have to compete with demands for increased faculty salaries and higher maintenance costs welcome the expansion of the L.C. author catalog into a current national union catalog costing twice as much and requiring twice as much shelf space?" I submit in answer that the degree to which the college library will welcome the expansion is in direct ratio to the degree to which it accepts a research function.

Many of you will have seen "A Plan for Meeting College Library Problems: A Report of the Regents' Committee on Integration of College and University Library Resources in New York State" or Mr. Reuben Frodin's discussion of it in the October, 1954, Library Quarterly. In considering the provision of material for faculty use the report makes the point that special material of value in faculty teaching acquired by the college library "plays back" into the quality of the teaching and should be bought as freely as possible. In regard to material used by faculty members in research which is less directly related to their teaching the report suggests it should be bought when the prospects of its continued usefulness seem to merit the expenditure. This criterion of potential use

is the one which most of us employ in deciding what shall be purchased for faculty research outside the field of any special collections which our libraries may be developing. Beyond this our responsibility for faculty research lies in the area of maintaining the best bibliographic equipment possible and aiding the faculty member to secure the desired material through interlibrary loan, microfilms or other reproductions or by introduction to a research library owning the

The library with this view of its responsibility to faculty research will find the proposed union catalog of increasingly greater value as the years pass. The editing of non-L.C. entries for conformity of main entry, the provision of adequate cross references and the noting at the bottom of the entry of appropriate added entries, both author and subject, will increase the usefulness of this already indispensable cataloging tool. In the area of cataloging the actual return to the individual college library from the expansion will necessarily be conditioned by the amount of material the library acquires in the non-L.C. category. Of the greatest value to more college libraries will be the use of the National Union Catalog as a reference tool for the verification and location of titles to be requested on interlibrary loan. Ultimately the catalog will provide a series of comprehensive author bibliographies describing and locating the material. These uses of the National Union Catalog for college faculty research will not differ in kind from such use in the university library.

Equally important to the college library is the possible contribution of the expanded catalog to its services to the undergraduate student. I am now speaking from the viewpoint of a college (and there are many such in the country) with a scholarly faculty, a student body limited in number so that it has become highly selective, a moderate teaching load and a history of good library support—all factors leading to the generous use of the individual study project as a method of teaching. Since the faculty member usually demands that the major part of the project be based upon original sources. this undergraduate work provides the student with an initial experience in research -a foundation for the comparatively few who will go into scholarly careers; the sole experience of the many. It is manifestly the responsibility of the college library to provide the basic material for such special studies and honors work, seeking only to borrow additional materials which will be of little future use in the library. In many of our college libraries, therefore, will be found important collections of sources in the fields represented in the curriculum and a student may, in the course of writing a paper on Bishop Grossteste, use the Historia Anglorum of Matthew Paris as reprinted in the Rolls Series or make a study of eighteenthcentury literary criticism in the files of the Gentleman's Magazine.

The layman might suppose that in college libraries of this kind the number of requests for material not in the library's own collection would be fewer than in other college libraries. To the contrary, in the course of using the bibliographical tools in the field of his major interest, the student frequently comes across titles which seem important to his purpose and are not available in the home library. The student's satisfaction in his academic work demands that the library meet his need. We at Wellesley College handle many such student requests, meeting some by borrowing titles on interlibrary loan or by sending the student with a letter of introduction to another library. (It has not been statistically determined how many of our students take advantage of the great research library in nearby Cambridge, not under the auspices of the library but through friendship with a Harvard undergraduate.) It is my guess that ultimately the National Union Catalog, because it will be easy to use and will locate copies, will remove a psychological barrier between the student and the book and will result in increased undergraduate demands for material in other libraries. I think this will be especially true in fields such as literary studies in which the author approach is so im-

I further prophesy that the increased undergraduate student demand for material outside the home college library will serve to intensify two trends now present in college-university relationships. The first of these is the growing reluctance of the university libraries for good and sufficient reasons to meet any and all requests for interlibrary loans from neighboring colleges. Some of these larger institutions in self defense have had recourse to limiting the number of loans to one college or have required the payment of a nominal fee for library use by outsiders. Neither of these particular solutions is desirable from the standpoint of the borrowing library for while the individual undergraduate student's need for material outside his own library collection is apt to be limited in time to a few weeks and in scope to one or a few volumes, the total number of such requests is apt to snowball at times of academic pressure. I believe that as the National Union Catalog becomes a more and more effective interlibrary loan tool, it will become necessary to regularize the relations between the libraries of colleges and nearby universities, perhaps along the lines of contractual agreements.

The second trend which I expect to see intensified as the Union Catalog increases in years is that toward cooperation among the colleges themselves. The outstanding

example of the Hampshire Inter-Library Center has been possible, of course, because of the close geographical location of colleges with a like academic atmosphere. I know personally of another attempt by several more scattered colleges to form a kind of interlibrary loan union which died a-borning because of the obvious difficulty of locating materials within the group quickly enough. The National Union Catalog will at least put into our hands a tool for locating materials held among colleges which by reason of near location or some institutional association have a reasonable claim upon one another.

The creation of such agreements poses weighty problems of program analysis and organization. If they can be satisfactorily effected, however, the next step would be to use the National Union Catalog as a tool for cooperative acquisition programs. In my opinion the proposed expansion of the L.C. author catalog has almost incalculable significance for the college library.

By KEYES D. METCALF and ANDREW D. OSBORN

Proposal for Publishing the National Union Catalog

Dr. Metcalf is professor, Graduate School of Library Service, Rutgers University; Dr. Osborn is assistant librarian, Harvard University Library.

Many of the most important decisions reached by librarians must be made on an appraisal of relative values. As a rule we must make a choice, not between good and bad, or black and white, but between ways by which we can obtain the best returns from the limited funds available. This observation is, I think, a commonplace in day to day administration. It applies also to related library enterprises, a good example of which is one that is not very different from the problem under consideration—the Union List of Serials—the first edition of which was successfully compiled and published thirty years ago.

Despite its name, the Union List of Serials did not attempt to record all serial publications; instead it concentrated on selected groups. These groups comprised what can rather loosely be called periodicals and society publications which were recognized as the serials whose listing would be most profitable to all concerned. In the compiling and editing of the Union List of Serials its editor. Winifred Gregory, aimed at the best practical results, not at a polished and definitive bibliography. With these limited aims she was able to push the work to a conclusion. Its success can be gauged by the statement of a British colleague who last year hailed the Union List of Serials as "the greatest union list ever published."

The precedent provided by the Union List of Serials may well help in the somewhat similar project, the National Union Catalog, which many of us have long hoped could be published, but which when considered realistically seemed almost impossible for two reasons:

First, the tremendous size and cost of the undertaking was apparently so great as to make the task impossible without a very large subsidy.

Second, there seemed to be no prospect of an adequate subsidy if the publication was to be maintained on a current basis. Experience has shown that a catalog of this kind is out of date before publication; its day of usefulness is short unless ways and means can be found for continuations or supplements; and foundations are not interested in subsidizing projects that must be continued indefinitely.

Recent events have put a new aspect on the second of these problems. It now seems likely that, beginning with January 1956, the currently published Library of Congress author catalog will include in its cumulations, and possibly in its monthly issues, a record of the more important holdings of a large group of cooperating libraries in addition to those of the Library of Congress, II this hope becomes a reality, the task of publishing the material in the National Union Catalog as it now stands has a much more definite limit and may become sufficiently manageable in size so the thought of publication should be considered afresh. A study of the situation, however, seems to indicate that even so publication of the complete National Union Catalog would still be too large a task to be undertaken as a self-supporting project, and probably too large for us to hope to have it made possible by a subsidy.

This is the point at which the precedent of the Union List of Serials comes in. It has seemed to some of us that considerable portions of the National Union Catalog might be omitted without doing serious harm just as there are many types of serial publications whose omission did not seriously impair the value of the Union List of Serials. If these portions are omitted and the editorial work is carried on along practical lines, it might well be possible to publish the National Union Catalog successfully and still include in it a very large percentage of all the information desired by librarians and bibliog-

raphers if a comparatively small subsidy were made available. Under these circumstances we should stand a better chance of securing the subsidy. With all this in mind a study has been made of groups of titles which might be considered for exclusion. A discussion of them follows.

Titles in the Library of Congress Printed Catalog

Far and away the biggest saving can come from omitting all items in the Library of Congress printed catalog. Vast numbers of Library of Congress entries represent either unique holdings or popular titles which can be found in thousands of libraries. There is little point in listing either type in the published National Union Catalog whose primary objectives are to provide titles and locations not given in the Library of Congress printed catalog. However, it must be admitted that the omission of the nonunique titles will at times conceal multiple locations which could profitably be disclosed and that there may be a somewhat heavier burden of interlibrary loan requests on the Library of Congress. But some of these requests can be passed on to other libraries through the existing records of multiple holdings at the Library of Congress.

All things considered, it seems wise to suggest that the Library of Congress printed catalog and the published National Union Catalog be considered complementary works; or, in other words, to propose that publications listed in the Library of Congress printed catalog be omitted from the published National Union Catalog.

Serials

The major reason for recommending the exclusion of serials is that holdings cannot be satisfactorily given in the proposed publication, except for titles which are complete and dead. Without holdings, the listing of serials would not be satisfactory. In addition, it must be remembered that the Union List of Serials and the New Serial Titles list go a long way in caring for needs in this field. Accordingly, it seems desirable to suggest that lists of serial holdings be left for the Union List of Serials in whatever form that may take from now on, and to omit the

serials from the published National Union Catalog.

Non-Book Materials

Although entries for non-book materials are not numerous, it will simplify compilation and editing of the published National Union Catalog if they are omitted. They include broadsides, maps (but not atlases), manuscripts, etc. Popular sheet music might be classed with the non-book materials for omission. Microreproductions of books and pamphlets might be included, except when these are part of a large-scale publication program such as the English short-title list and Evans, for example.

Early Printings

Incunabula do not need to be included, since they are covered by the Stillwell census. Likewise, early British imprints can be left to the Short Title Catalogue and Wing, and early American titles to the American Antiquarian Society project to reproduce on microprint cards American publications before 1801.

Offprints and Paged Analyticals

Although periodical articles are not infrequently requested as though they were books, it is suggested that offprints and paged analyticals be omitted.

Public Documents Published in the United States

Since the vast mass of American government publications, including those at the federal, state and local levels, are included in the Library of Congress printed catalog, it is recommended that American government publications be omitted. Locally published documents not recorded in the Library of Congress printed catalog would naturally be requested from state libraries or state university libraries.

United Nations Documents

Since depository libraries are listed in the United Nations Documents Index and since the United Nations Library in New York City is available for special help, there seems to be little need to include publications of

the United Nations or its affiliated agencies. In any event, the Library of Congress printed catalog covers most of these publications. The publications of the various governmental international organizations (e.g., the League of Nations and the Organization of American States) can be excluded on the score that the great mass of their publications can be found in the Library of Congress printed catalog.

Dissertations

Since American dissertations should be available in the institutions which granted the degree, one location in addition to the Library of Congress is always known, and they might be omitted.

Other Items

There are undoubtedly a number of other small groups which might be omitted because they are covered elsewhere or because there is slight demand for them. Typical of these might be congressional speeches which are really reprints, or hymn books which are quite numerous but in relatively small demand, and where the location of the most important collections in the country are known, or books on other subjects where there are satisfactory printed bibliographies available.

DEBATABLE ITEMS

The classes of material so far considered may result in some inconvenience if they are omitted, but in general it seems reasonable to suggest their omission in order to reduce the National Union Catalog to manageable proportions for editing and publication. There remain a number of classes which should be considered but where exclusion is more debatable. These include secondary school textbooks, publications of large corporate bodies, entries for certain voluminous authors, and foreign discritations. A brief discussion of these may be profitable.

American Secondary School Textbooks

Harvard has a special collection of over 50,000 secondary school textbooks, mainly nineteenth-century American publications.

This number could be multiplied several times over to give a reasonable estimate of the total output recorded in the Union Catalog, but with certain notable exceptions these publications are not required for scholarly research. Moreover, their listing in many cases is troublesome because of the publishing custom of listing numerous places in the imprint and of changing the sequence of these place names to suit local exigencies. For the few scholars who are interested in this material, a list of the larger collections in the country might be sufficient. Some items have special interest (e.g., the works of Lindley Murray and the McGuffey Readers), and might be included. On the other hand, foreign textbooks might be included because they will be comparatively few in number and in some cases would be more difficult to recognize as secondary school textbooks and would certainly be more difficult to find in libraries in this country.

Fuluminous Authors

Harvard has some 8,000 author entries under Shakespeare. Many problems in Shakespeare bibliography would have to be faced or glossed over if all the 8,000 entries plus the additional thousands which other libraries could add-were included. Should not such an author be excluded and left for a special hibliography to be compiled by a competent bibliographer? Perhaps a ruling could be set up so that entries with more than a thousand titles would be omitted: the principal libraries being mentioned instead as well as any published bibliographies which represent location. If this were done, the bulk of the Union Catalog could be reduced by a million entries or more.

The thousands of entries for the Bible and its parts could come under this ruling. Likewise, the publications of major American institutions with extensive publishing programs can be omitted on this score. The 3,000 entries which the Widener Library has under Harvard University are a case in point. Anyone seeking a Harvard publication could properly apply to the Harvard University Library, and the same would hold true with other universities. Appeals for University of Chicago publications could go to the University of Chicago, and so on.

Foreign Dissertations

In a class by themselves are the very numerous foreign dissertations. The Library of Congress alone has upwards of a third of a million theses from other countries, few of which are represented in its printed catalog, though all of them are listed in the National Union Catalog.

For foreign dissertations the matter to debate is whether they should be included in the published National Union Catalog or whether they should be left for a separate bibliography. Obviously, the dissertations of noted authors should be included, e.g., Bergson. The greatest question comes with the thousands of medical and legal dissertations which can be sought in obvious places: for example (apart from the Library of Congress) the Harvard Law School Library and the Armed Forces Medical Library. Note in this connection that there is a small but steady demand for foreign theses and a number of requests for them may regularly be found in the Weekly List of Unlocated Research Books. Would a good compromise be to list all non-medical and nonlegal foreign dissertations?

THE PUBLICATION PROGRAM

We estimate that the number of entries would be reduced by at least a half if the suggestions just discussed are approved. It would then seem possible to envisage a successful edition of the National Union Catalog. This edition would be printed by offset from typewritten copy. It would contain brief entries designed primarily for location purposes.

Major editing problems would remain to be faced. These relate primarily to variant printings, cross references, and entries under two or more forms of heading. These editing problems should be faced realistically, just as Winifred Gregory faced the somewhat similar problems in compiling and editing the Union List of Serials. Variant printings might be ignored when there is no good reason for recognizing them as independent bibliographical entries. Cross references should to a large extent be ignored when they are obvious or when the Library of Congress printed catalog covers them. It should be noted in this connection that the Library of Congress printed catalog does not by any manner of means include all the references in the Library of Congress card catalogs, a precedent which might well hold for the published National Union Catalog. And for entries under a variety of forms, the editors must do their best and allowance must be made in the published work for a certain amount of inconsistency. It would be easy to spend millions of dollars in editing the catalog, but this must be avoided. A bird in the hand is worth two in the bush.

The intent of this paper is to urge the acceptance of a limited program for the publication of the National Union Catalog. In essence the publication would be complementary to the Library of Congress printed catalog, as well as to the various other accepted bibliographies. It would not be a complete and perfect bibliography, but it would be a tremendously valuable bibliographical tool, both for the location of copies and for the compilation of bibliographies of various kinds. With the proposed expansion of the Library of Congress Author Catalog into a union catalog, beginning next year, the time has come to reproduce the retrospective National Union Catalog to the best of our ability. If general agreement can be reached on this proposal, we could ask the Library of Congress to study the costs involved, to estimate the size of the subsidy, if any, that would be required, to make possible a publication at a low enough price so that the whole project would become feasible.

Future Program

(Continued from page 12)

provide readers with information on developments in the audio-visual field. A number of readers have already expressed favorable comments on this new feature. Librarians in practice can assist in improving the journal by writing and by encouraging their staff members to write. If there is any single criterion to guide writers, it is to present new ideas. Contributors should follow the basic style of the journal in presentation, footnote citations, and tabular organization. We are counting on your full cooperation.—Maurice F. Tauber, Editor.

Faculty Service

(Continued from page 15)

ject specialists, but the functions of the specialist might well be performed immediately under the office of the director, or out of a subject divisional library, or out of a departmental library. It is believed, however, that once the service is created the confidence and support necessary to its success would soon be established in sufficient degree to make the innovation successful.

Certainly the librarian convinced of the efficacy of his calling will not cringe at improving or increasing services. Let the faint-hearted but look back over the progress of the last half-century and see how far he has come already. He should note also that special libraries have always given most of the services discussed above. Indeed, the coordination of faculty services entails little more than the adaptation of certain special library practices to an academic situation.

Use of TAAB

(Continued from page 18)

which TAAB service provides.

In conclusion, it might be said that the TAAB method has the virtue of being cooperative, comprehensive and competitive. It is cooperative in the sense that libraries and booksellers derive mutual benefit in a new and imaginative way. Comprehensiveness is achieved by the large-scale attention given by booksellers to an individual library's wants. It is competitive because of the number of dealers involved and this tends to encourage low quoting on items desired. The method has much to recommend it.

Selected Reference Books of 1954-1955

Miss Winchell is reference librarian, Columbia University.

INTRODUCTION

L Semiannual series this survey is based on notes written by members of the reference staff of the Columbia University libraries. Notes written by assistants are signed with initials.2

As the purpose of the list is to present a selection of recent scholarly and foreign works of interest to reference workers in university libraries, it does not pretend to be either well-balanced or comprehensive. Code numbers (such as All and IA26) have been used to refer to titles in the Guides and its first Supplement.

BIBLIOGRAPHY

Besterman, Theodore, A World Bibliography of Bibliographies . . . 3d. rev. ed. Genève, Societas Bibliographica [1955-] v. 1- , 90 Sw.fr. Contents: v. l. A-E. 1326 col.

The author estimates that this edition, to comprise four volumes, will list 80,000 separate items, compared with 65,000 included in the preceding edition (Guide A11). Examination of the first volume substantiates this figure, with new materials particularly noticeable under such topical headings as "Aeronautics." "Atom, Atomic energy," etc. Coverage through the closing date of 1953 seems adequately met, with a few later entries included as they became available. Arrangement, scope and limitations remain as

in the earlier editions, so that only upon appearance of the author-index volume can full use of the set be made. For the first time, the author has worked extensively with the resources of the Library of Congress, and to seemingly good effect for inclusion of U.S. items. Even so, the number of bibliographic inconsistencies and omissions in American imprints is abnormally high.-J.N.W.

Obersetzungen der Bibliographie deutschsprachiger Werke. Verzeichnis der Seit 1951 erschienenen und in der Deutschen Bücherei vorhandenen Schriften, bearb. und hrsg. von der Deutschen Bücherei. Leipzig, VEB Verlag für Buch- und Bibliothekswesen, 1954. . Jg. 1. , quarterly.

A quarterly bibliography listing translations from the German into other languages, which have been published since 1951. The arrangement is by large class groups, subdivided by languages with an author index. Bibliographical information is detailed, the translated title is followed by the original German title in brackets, and prices are included. It is hoped that a volume covering 1945-1950 will follow.

Evans, Charles. The American Bibliography . . . v. 13, 1799-1800, by Clifford K. Shipton. Worcester, Mass., American Antiquarian Society, 1955. 349 p. \$25.

A carefully edited continuation of an invaluable bibliography (Guide A142). Volume 13 completes the year 1799, which had only been covered through the letter "M" in volume 12, and brings the work down through the end of 1800, with author and subject indexes. Most of the items included were either examined or verified in reliable bibliographies, and not, as so often occurs

¹ COLLEGE AND RESEARCH LIBEARIES, January and July Lauses, starting January 1952. ² Eleanor Buist, Kenneth Lohf, Suzanne Brasz, Eugene Sheeby, John Neal Waddell, ² Constance M. Winchell, Guide to Reference Books (The ed.; Chicago: Al.A. 1951); Supplement (Chicago: Al.A. 1954).

in Evans' work, accepted on the basis of booksellers' advertisements. Those titles not examined or described by a careful bibliographer have been put in brackets. When an anonymous work is listed under author, cross-reference is given from the title. Imprint information is given more fully than in previous volumes, but, because of considerations of space and cost, titles have been abbreviated to include only their essential portions. Nearly all of the items have been located in libraries or private collections, and, in most cases, multiple locations have been listed. It is heartening to read in the introduction that negotiations are now underway regarding the preparation of a final volume which would include a supplement and index to the complete set.-K.L.

Paperbound Books in Print. New York, Bowker, 1955- . \$2. per year.

Intended as "an easy-to-use index to available paper books," the work is scheduled to appear three times a year (January, April, and September) and will include both items in print and those announced for publication within the next quarter. The first part is a selective subject index with alphabetical title arrangement under broad subject headings, plus a highly selective fiction index containing a mere sampling of titles. The principal part of the work is an author listing with more than 4500 items appearing in the Summer number. Price, publication number, and publisher's symbol are included in each entry.—E.S.

Pennink, R. Catalogus der Niet-Nederlandse drukken:1500-1540 aanwezig in de Koninklijke Bibliotheek 's-Gravenhage. 's-Gravenhage, Staatsdrukkerij- en Uitgeverijbedrijf, 1955. 267p. G.20.

May be ordered from Nijhoff. 2573 numbered entries.

Lists European imprints, 1500-1540, not published in the Netherlands, which are in the national library. Detailed references are given to bibliographic sources and there are indexes by printers and original owners. Taube, Gurli Elisa. Svensk festskriftsbibliografiåren 1891-1925. Uppsala, Appelbergs Boktryckeri, 1954. 168p. (Svenska bibliotekariesamfundets skriftserie, II)

A listing of Swedish festschriften arranged alphabetically by person honored, giving the full contents of each volume. There is a classed index by subject field and an author index to the contents of the volumes.

U.S. Library of Congress. General Reference and Bibliography Division. Current National Bibliographies, compiled by Helen F. Conover. Washington, D. C., Government Printing Office, 1955. 132p. \$.75.

An extension of the series, "Current National Bibliographies," printed from 1949 to 1958 in the Library of Congress Quarterly Journal of Current Acquisitions (Guide A132 and 1A26). Limited to sources being published currently in mid-1954, the bibliography includes lists of publications of all kinds—books, documents, pamphlets, serials, theses, maps, music. However, specialized and selective subject lists of general literature are included only for countries where fuller sources are not available. With few exceptions, all of the items are being received currently by the Library of Congress.

Arrangement is by broad political areas and individual countries. Where resources for a particular country are extensive, items are grouped under the following headings: general (mainly books), indexes of periodical articles, government documents, and directories of periodicals and newspapers. Bibliographical description is complete, and nearly all of the entries are annotated. There is an index of titles and a directory of publishers.—K.L.

ENCYCLOPEDIAS

Ensiklopedia Indonesia. Bandung, N. V. Penerbitan; 's-Gravenhage, W. Van Hoeve, 1954- . v.1- . il. \$8.50 per vol.

v.l, A-E

Characterized by very brief articles on a

wide variety of subjects (including biographies of living persons) this general encyclopedia emphasizes Asiatic affairs. Unfortunately, no bibliographies are given. There are numerous "see" references, plus "see also" references indicated by asterisks. Good typography, numerous illustrations, maps and plates contribute to the generally attractive format.

Volume I contains a special section on the flag, constitution and cabinet members of Indonesia, the Declaration of Human Rights, opening bars of national anthems, a table of heads of governments, and one of national holidays.—E.S.

PERIODICALS

Paris. Bibliothèque nationale. Catalogue des périodiques clandestins, 1939-1945. Paris, 1954. 282p. 880fr.

This is a catalog of clandestine serial publications distributed in Nazi-occupied countries. In three sections: 1) Periodicals distributed in France; 2) Periodicals distributed in other countries; 3) Supplement, As only those serials are listed of which original or photostatic copies are to be found in the Bibliothèque nationale, the listing for France is nearly complete, comprising 1015 titles, while the listing for other countries is partial, comprising only 71 titles. Bibliographical descriptions are full, including, whenever possible, publisher, place and date of publication of each issue. In the notes any additional available data, such as the names of editors, printers, contributors, etc., are given. There is a good detailed index.-5.5.

Verzeichnis ausländischer Zeitschriften in Schweizerischen Bibliotheken. Répertoire des périodiques étrangers reçus par les bibliothèques suisses. 4.Aufl. Bern, Vereinigung Schweizerischer Bibliothekare, 1955. 620p.

ed. 1904; 2. ed. 1912; 3. ed. 1925.
 P. xix-xl contain a list of institutions reporting with conditions of lending.

This union list includes some 34,300 titles, with indication of holdings, of foreign periodicals published since 1900 found in Swiss

libraries. Arrangement is alphabetical by tithe even in the case of publications of societies and institutions, i.e., annual reports, bulletins, proceedings, etc. are entered directly under title instead of under the name of the sponsoring body as is done in American libraries. However, there is a geographic index which gives societies, institutions and government agencies under place name listing their publications and giving references to the entries in the main alphabet.

RELIGION

Barrow, John G. A Bibliography of Bibliographies in Religion. Ann Arbor, Edwards Bros., 1955, 489p. \$15. (For sale by the author, 716 Brown Bldg., Austin I, Texas.)

A comprehensive compilation attempting "to bring together all separately published bibliographies in the field of religion." It does not include bibliographies appended to books and to articles in codices, or indexes of forbidden books.

The arrangement is by subject field with an author and subject index. Under each, subject, titles are arranged chronologically by date of publication. Titles are annotated and location of copies in numerous American and European libraries is indicated. Unfortunately, subject headings do not stand out well in a lithoprinted work, and, as there are no running titles, it is necessary to work almost entirely from the table of contents.

Bibliotheca catholica neerlandica impressa, 1500-1727. Hagae Comitis, M. Nijhoff, 1954. 669p. fl. 40.

Intended as a "repertory of the spiritual literature" (i.e., "everything printed for the spiritual life") published in the Low Countries during the period indicated. Arrangement is chronological with a main-entry index. Information given includes place, publisher and date, but not pagination, and there are references from later to earlier editions of the same work. Compiled from bibliographies, library catalogs, etc. (of which there is a list with abbreviations), the fact that "none of the works listed was ever

actually consulted" is partially compensated for by the inclusion of at least one source of reference for each entry.—E.S.

[Brunotte, Heinz] Evangelisches Kirchenlexikon; kirchlichtheologisches Handwörterbuch. Göttingen, Vandenhoeck und Ruprecht [1955-] Lfg. 1-3 in 2 pts. DM. 4.80/lfg.

An editorial group of German Protestant clergy and theological scholars has published the first sections of an encyclopedic dictionary, to be completed in three volumes (35 parts). It is intended as a modern supplement to older works of reference on Christian theology and church affairs, emphasizing recent literature, in particular the foreign titerature unavailable in Germany for a considerable length of time. The editors expressly refer to Osterloh and Engelland. Biblisch-theologisches Handwörterbuch, 1950, for more thorough treatment of Biblical theology, and to the Evangelisches Soziallexikon, 1955, for greater detail in matters of Protestant social ethic. Entries include theological concepts, clerical terms, national and geographic areas with emphasis on their religious history, and biographies of persons associated with the field of religion. A stated aim is "to define concepts so as to enable readers to make their own judg-

Approximately 16,000 entries are contemplated, with a series of long articles on major subjects as the main feature. Articles other than brief ones are signed and contain bibliographics.—E.B.

Williams Library, London. Dr. Williams's Library, London. Catalogue of Accessions, 1900-1950, Being a Catalogue of Books Published and Added to the Library during that Period. Ed. for the Trustees, by Doris M. Johnson. London, Dr. Williams's Trust, 1955. 776, cxlv p. £2.5s.

This library is particularly strong in theology, ecclesiastical history, history of religion, philosophy and related subjects, and also includes materials in history, sociology, and the history of language and literature. It does not have fiction, science, technology or music,

The main part of the catalog, arranged alphabetically by author, is followed by a supplement which lists periodicals, publications of societies, connected series, etc. Only works published between 1900-1950 are included.

SOCIAL SCIENCES

Annuaire Européen, European Yearbook. Published under the auspices of the Council of Europe. The Hague, Nijhoff, 1955- v.l. 584p. G.28.50.

"Devoted to the scientific study of European international organizations, including their constitutions, their functions and their work," the first volume of this yearbook concentrates on eight principal organizations (e.g., Council of Europe, European Coal and Steel Community) with plans to include new and more technical institutions and to supplement present data in subsequent volumes. In three sections: Articles (historical and descriptive information); Documentary: and Bibliographical (abstracts of important books on European integration and a selected list of articles). Documents appear in both French and English, abstracts in English, and the bulk of the articles in French with English summaries. Indexed.-E.S.

Bernsdorf, Wilhelm and Bülow, Friedrich, eds. Wörterbuch der Soziologie, unter Mitarbeit zahlreicher Fachleute. Stuttgart, Enke, 1955. 640p. DM. 26.40.

A one-volume encyclopedic dictionary of sociological terms with signed contributions by 84 German specialists. Most articles contain brief bibliographies with American and English writings frequently cited. The work resembles Vierkandt's Handworterbuch der Soziologie, 1931, but is arranged as a dictionary. Cross references are numerous, many referring from the English term. The editors state that the work is not intended as a major handbook for specialists but rather as a reference tool for students of social science and the practicing social worker. For reference purposes it should prove more satisfactory than a number of one-volume subject dictionaries of similar

purpose now appearing in English. A supplementary volume on sociologists is planned.—E.B.

Bibliography on the Communist Problem in the United States. New York, Fund for the Republic, 1955. 474p. \$5.

An annotated bibliography "primarily devoted to literature relating to Communism in the United States since . . . 1919," this is one of two volumes on the subject published by the Fund for the Republic. The companion volume, Digest of the Public Record of Communism in the United States (New York, 1955), is a "collection of abstracts of decisions, laws, ordinances, hearings, reports and other public documents."

Arranged in two main indices, author and subject, the Bibliography is supplemented by five appendices. In general the closing date is 1952, but some later items are included. Hearings and other public documents are listed only in the companion volume.—E.S.

Hamburg, Welt-Wirtschafts-Archiv, Länderlexikon, Hamburg, Verlag Weltarchiv, 1955 . v.l. , \$38.25 the set.

A new encyclopedia of the social and economic structure of the countries of Europe, exclusive of the Soviet Union, this first volume is to be followed by two more to encompass other major geographical regions. Arrangement is by country, with articles of substantial length, e.g., Great Britain, 150 pages. Topics covered include governmental structure, politics, social organization, geography, economics, finance, agriculture, trade, industry and education. Although there is some historical orientation, emphasis is on the present. Bibliographies seem adequate and current.—J.N.W.

Szladits, Charles. Bibliography on Foreign and Comparative Law; Books and Articles in English. N.Y., Oceana Pubs., 1955, 526p. \$15.

An extensive bibliography of some 14,000 books and periodical articles in English in the broad fields of foreign and comparative law not including Anglo-American legal systems. The arrangement is by a fairly detailed classification scheme with an index of authors and a geographic index. In many cases brief descriptive annotations are given for books, and some of what are considered the more important periodical articles are marked by asterisks. This should be an important work in the fields of political science and government as well as law.

DICTIONARIES

Belisle, Louis A. Dictionnaire général de la langue française au Canada. Québec, Belisle Editeur, 1955 . fasc. 1-. il. \$15.

To be published in about 33 fascicles of 64 pages each, the resultant volume to include some 2,000 pages, this is a general French dictionary, based on Littré, but particularly useful because it contains Canadianisms with their equivalents in literary French. A fleur-de-lis is used to indicate words and meanings peculiar to Canadian French. Special attention is given to Canadian flora and fauna, and terms of commerce and industry as well as technical terms.

Citations showing usage are drawn from French classical authors, from modern French and from the colloquial speech of the French in Canada.

Corominas, Juan. Diccionario crítico etimológico de la lengua castellana. Berna, Ed. Francke, 1954 . v.l., \$13. per vol.

A comprehensive etymological dictionary giving dates of origin of words with quotations showing usages and derivations. Covers the languages of both Spain and Spanish America and includes the ancient languages, such as pre Roman Iberian and vulgar Arabic, as well as dialects and Latin-American influences.

Collison, Robert Lewis. Dictionaries of Foreign Languages; a Bibliographical Guide to the General and Technical Dictionaries of the Chief Foreign Languages, with Historical and Explanatory Notes and References. New York, Hafner Pub. Co., 1955. 210p. \$4.

Prepared by an English librarian and based on the collection in an American university library, this bibliographical guide should be helpful to librarians, translators and others needing information about dictionaries. The selection is comprehensive, and historical and critical notes are given for the dictionaries of all the major languages of Europe, Africa and Asia. The larger chapters are divided into sections: general, etymological, specialist (synonyms, antonyms, etc.) dictionaries relating to special periods, slang and dialect, and bilingual (usually English, but with some important foreign-language dictionaries noted). An appendix lists technical dictionaries in various languages arranged by subject.

Snell, Bruno. Lexikon des frühgriechtschen Epos. In Zusammenarbeit mit dem Thesaurus Linguae Graecae und mit Unterstützung der UNESCO und der Joachim-Jungius-Gesellschaft, Hamburg . . . Göttingen, Vandenhoeck & Ruprecht, 1955- . Lfg. 1 . .

This new dictionary is the first part of the Thesaurus Linguae Graecae to be published. Although similar in its general intention to the Thesaurus Linguae Latinae, (Guide, M340) the Greek Thesaurus will contain when completed a series of dictionaries, each covering a different literary period. This one will list every word which occurs in the texts of the earliest Greek literary works up to but not including the works of Antimachos.—S.S.

SCIENCE

Sachet, Marie-Hélène and Fosberg, F. Raymond. Island Bibliographies: Micronesian Botany; Land Environment and Ecology of Coral Atolls: Vegetation of Tropical Pacific Islands. Comp. under the auspices of the Pacific Science Board. [Washington] National Academy of Sciences-National Research Council, 1955, 577p. \$6.

In three separate sections (as suggested

in the sub-titles), each section of this annotated bibliography is arranged by author and has its own subject index. Books, periodical articles, mimeographed material, and some unpublished items are included. Bibliographical information is given in abbreviated (and often unsatisfactory) form, but location of copies, primarily in Washington, D. G., libraries, is indicated. Indexing consists in grouping authors' names plus dates of publication under subject headings without indication of page number. There is a list of serial abbreviations and a separate addenda list for each section.—E.S.

APPLIED SCIENCE

De Vries, Louis. English-German Technical and Engineering Dictionary. 1st ed. N.Y., McGraw-Hill, 1954, 997p.

A companion volume to his German-English Technical and Engineering Dictionary (Guide, Suppl. 1P5).

Lists more than 130,000 entries. Emphasis is on engineering terms but other technical and some few general terms are included.

Harvard University. Psycho-Acoustic Laboratory. Bibliography on Hearing. S. S. Stevens, Director; J. G. C. Loring, Compiler; Dorothy Cohen, Technical Editor. Cambridge, Mass., Harvard Univ. Pr., 1955, 599p. \$7.

An enlargement of A Bibliography in Audition, comp. by George A. Miller [and others], 1950. 2v.

Covering the period 1958-1952, with a selection of materials before 1938, this edition contains over 10,000 titles, almost doubling those in the first edition and repeating all titles listed there. The large subject fields covered include: anatomical, biophysics, animal studies, speech and information, music, noise, neural activity, biochemistry and pharmacology, psychophysics, deafness, audiometry, and auditory theory.

The main arrangement is alphabetical by author with a subject index. Titles are usually given in the original language followed by an English translation in brackets. The Guide to Long-Playing Records. N.Y., Knopf, 1955. 3v. \$11.50.

Contents: v. 1, Orchestral music, by Irving Kolodin: v. 2, Vocal music, by Philip L. Miller: v. 3, Chamber and solo instrument music, by Harold C. Schonberg.

Three recognized experts present here an annotated list of the serious music available on long-playing records, which, by virtue of comprehensiveness and practicality, should be useful to a very large group. Listing is by composer, with subdivisions by musical form, and there are supplementary listings in volumes 2 and 3 of individual performers in collections, miscellanies, etc. Although no mention is made of a closing date, a number of early 1955 releases are included.

Relative merits of the several performances of a given work are clearly indicated, and although personal preferences are obvious (and properly so), the balance between objective and subjective criticism seems skillfully maintained. There are adequate indexes; the uninitiated, however, may be confused by the arrangement of abbreviations at the head of each title. Particularly noteworthy is the high literary standard of the text of the annotations.—J.N.W.

LITERATURE

Jonas, Klaus W. Fifty Years of Thomas Mann Studies, 1902-1951. Minneapolis, University of Minnesota Press, 1955. 217p. \$5.

A selective compilation of approximately 3,000 books, parts of books, pamphlets, and periodical and newspaper articles about Mann, covering the period 1902, the year in which articles on Buddenbrooks began to appear, through 1951, the year of publication of Der Erwählte. However, important items of earlier or later dates are included, as well as Mann's self-critical and autobiographical writings. The systematic arrangement includes sections on bibliography, biography, themes, style, political, social and philosophical thought, research in progress, and on each of the author's novels, novelettes and short stories. Except in the case of

newspaper citations, bibliographical information is complete and uniform.—K.L.

BIOGRAPHY

Who's Who in Librarianship, ed. by Thomas Landau. Cambridge, Bowes and Bowes, 1954. 268p. 50s.

The first of its kind for British librarians, Who's Who in Librarianship includes approximately 3,000 notices of the usual who's who nature, although comparison with other sources of information suggests a rather high percentage of omissions. "Special interests" are noted in most of the sketches, and these have been further used to form a number of supplementary classified lists.

Who's Who in Library Service. 3d. ed., Dorothy Ethlyn Cole, ed. N.Y., The Grolier Society, 1955. 546p. \$6.

This new edition of Who's Who in Library Service lists some 11,000 U. S. and Canadian librarians, with personal and professional data which seem pertinent, accurate and, for the most part, current. Information is based on questionnaires sent to graduates of approved library schools and members of the several national library associations; apparently, those librarians failing to reply were excluded, regardless of other considerations,—J.N.W.

Who's Who in World Aviation. Washington, D.C., American Aviation Publications, 1955. v. 1. \$10.

Includes some 2400 names covering officials of aircraft companies and airlines; officers of the air services of all countries; distinguished members of pioneer pilot organizations; government officials and legislators with significant interest in aviation,

ATLASES

Atlas mira. [A. N. Baranov, V. N. Lysiuk, S. I. Shurev and others, editors] Moscow, 1954. [13]p. 283p. of colored maps. 51 cm. \$55.

A world atlas, in Russian, prepared under

the Chief Administration of Geodesy and Cartography of the Ministry of Internal Aflairs, by order of the Council of Ministers of the U.S.S.R.

Maps are primarily physical and political; unlike the Bol'shoi sovetskii atlas mira (Guide U169) there are no economic or historical maps. Considerable emphasis is given to communication routes. Seventy-five maps (or approximately 25%) are of the U.S.S.R. and its subdivisions, and 105 are devoted to Western Europe. Remaining sections include Asia (52), Africa (17), North America (91), South America (14), and Australia, the oceans and polar-regions (17). The bulk of the work was completed in 1953. The index, to be published separately, is not yet available. To facilitate reference to the key to symbols a duplicate unbound page on firm paper is provided.

The cartographic methods employed appear to be of superior quality, and format is comparable with the best atlases published

in Europe.-E.B.

Svenska sällskapet för antropologi och geografi, Stockholm. Atlas över Sverige. Stockholm, Generalstabens litografiska anstalts forlag, 1953. . \$112 complete.

A new and valuable regional atlas of Sweden, which, when complete, will contain 150 folio-size colored maps together with descriptive texts and will afford a thorough treatment of all aspects of Swedish geography. The fourteen sections will include material on geophysics and geology, meteorology and hydrography, pasturage and animal husbandry, population, agriculture, forestry, industry, communications, trade, economic conditions, social conditions, cultural development, political geography and history, There are extensive English summaries in each folio section, and all maps and tables have parallel English headings. Scheduled to be completed in about three years, the atlas will contain seventy-five fascicles (kartblad) of which fifteen have been issued .-K.L.

HISTORY

Diccionario histórico argentino, publicado bajo la dirección de Ricardo Piccirilli, Francisco L. Romay [y] Leoncio Gianello. Buenos Aires, Ediciones Históricas Argentinas [1953-1954] 6v. \$70.

This alphabetical dictionary consists, in general, of brief articles on persons, places and institutions connected with the history of Argentina. Some longer, survey-type articles on broader subjects are also included. As the chief emphasis is on biography, numerous sketches of eminent artists, scientists and educators, in addition to those of historical figures, are included. Unusual but useful, especially to librarians, is the inclusion of articles on the history of the country's major periodicals and newspapers.

Although prepared by Argentine scholars, the articles are not signed and the bibliographics are brief and scattered. Furthermore the work has not been indexed and cross references have generally been omitted. Thus, unfortunately, the wealth of information accumulated here is not readily acces-

sible. S.S.

Historical Abstracts: a quarterly of abstracts of historical articles appearing currently in periodicals the world over . . . Eric H. Boehm, Editor v.l, no.l- March, 1955- Vienna, Historisches Seminar, 1955- quarterly, \$15 to individuals and to institutions with an annual book fund of less than \$10,000; \$25 to institutions with an annual book fund of more than \$10,000,

The first two issues of this new abstract journal in the historical field contain almost 1700 abstracts from more than 400 periodicals, with the expectation that coverage will be extended to more than 600 periodicals by the end of volume two. It is intended to include articles on "political, diplomatic, economic, social, cultural and intellectual history appearing on the period 1775-1945 in the periodical literature (including year books) the world over."

Each issue will also include a brief news section, installments of a World List of Historical Periodicals, a list of the periodicals abstracted; and subject and author indexes.

Presidential Notes

We hope we are not subject to the epithet "philanthropoids," but after our first experience with foundation giving we recognize clearly that "giving" on any large scale is exacting and responsible work, albeit satisfying and exhilarating. As president of ACRL I am much indebted to members of the Committee on Foundation Grants for long hours of thoughtful work on a recent snowy weekend in Chicago. You will recall that in Philadelphia Dr. W. Homer Turner, executive director of the United States Steel Foundation, Inc., turned over to ACRL a check for \$30,000. This generous grant we were to distribute in modest amounts to privately supported liberal arts colleges for strengthening or modernizing library teaching or learning tools. A portion of the grant was to be retained for financing research into current problems of college libraries.

A special committee was appointed to administer this grant and to consider ACRL's long-term program with reference to procurement and use of foundation funds. During the fall, information about the United States Steel Foundation project and proredure for application was issued in CARL and several national educational journals, and ACRL state representatives were asked to assist in spreading the word. Application forms were then distributed to all inquirers as well as to an existent list of some 500 liberal arts colleges. Approximately 400 formal applications were returned for committee review, so we feel that librarians and educators generally were alert to the opportunity and aware of a need for financial aid to libraries.

Our review of these requests only intensified our conviction that there is clear need for vigorous action in this field. This initial and exploratory grant will bring realistic aid to the 89 libraries selected by the committee. It will barely affect, however, the widespread financial poverty of the country's liberal arts college libraries. The Ford Foundation has recently provided powerful support to these colleges for other worthy purposes; ACRL must move vigorously to help assure that library services and facilities are

not further neglected. A statement of program adopted by the committee is appended. We are already optimistic that further funds will be available next year, but such a forthright development program is essential. An expanded program of direct grants will, we hope, look to the need for books and related material, for equipment, for consultative service on library programs, and for aid to individual librarians in continuing or expanding their postprofessional education. The basic need for continued research will not be overlooked.

Of the 400 applications received, the greatest number by far were for book or journal funds for general or specific purposes. Several were for audio-visual equipment or services of one kind or another; the New York Times on microfilm was frequently wanted. Less numerous, yet significant, were requests for general equipment, including building funds, and for assistance with programs of instruction in the use of the library.

The committee took particular account of whether or not the college itself, within its resources, had been giving a fair measure of support to the library program in recent years. Since it was desirable at this point to make a considerable number of modest grants to several institutions throughout the country, the committee naturally looked to cases where even a small grant gave promise of obvious benefit to the college educational program. The committee took special pleasure in offering basic support to some forthcoming interlibrary cooperative programs. It was heartened by those requests that revealed a clear attempt on the librarian's part to bring his financial problems into focus and often to solve them in part by genuine "boot-strap" methods.

The application forms did not merely startle us with the widespread and basic need for broad financial aid to libraries; they provided us with the beginnings of a collection of precise documentary information on the nature of the total need. The information thus provided by all applicants will materially assist ACRL in stating the

case for additional foundation support of

A word about the research grant project is also in order now. Final decisions will be made at midwinter meeting, but already the Publications Committee is reviewing several fruitful proposals. Only one grant has been finally approved at this time—Simmons College will undertake to accumulate information to support a "case method" procedure for teaching college library administration.

Whatever the future holds for us in the whole area of foundation support, ACRL owes a special debt to the pioneering vision of the United States Steel Foundation, the officers of which saw an important social need and acted on it. Furthermore I can say here, as president, that Arthur Hamlin and his colleagues at headquarters have furnished many hours of concentrated effort, much of it beyond working hours, in encouraging and supporting this germinal program. This work has been done in addition to already heavy responsibilities.—Robert Vosper, President, ACRL.

Policy Statement by the Committee on Foundation Projects

The Association of College and Reference Libraries, a division of the American Library Association, founded in 1876, is charged with the promotion of library service and librarianship in college, university and research libraries. Its services are available to all institutions of higher education. Within this scope, it has recently established a twofold program for administering foundation grants for college and university library development. One phase of the program involves allocation of funds to college and university libraries to make them more effective in the teaching program. Libraries so helped may use the funds for the purchase of books and teaching aids where the need is demonstrated. The second phase involves support for basic research in library problems leading to more effective operation and procedures. This phase includes examination of ways to stimulate use of libraries and teaching tools toward quality improvement in education, as well as standards for accreditation, self-evaluation, national and world-wide extension of bibliographical control of printed materials, regardless of language or form.

Machinery for the allocation of foundation grants was set up recently when it became evident that aid-to-education programs should include direct grants to libraries. It was realized that financial aid to college and university programs did not necessarily reach the libraries and lead to their enrichment. Unless the library is able to expand proportionately with the other divisions of the college or university, general education cannot appropriately benefit from corporation grants. Such an aid-to-education program is unbalanced and unrealistic.

Libraries with rich resources and adequate, well-trained staffs are basic to the instructional program of the college or university. This fact is so thoroughly recognized by accrediting agencies that almost one-third of an accrediting questionnaire is customarily devoted to the library and its ability to participate fully in the educational program.

The Association of College and Reference Libraries is prepared to allocate wisely substantial funds to bring college and university libraries to the level of strength and efficiency where they will be actually, as well as ideally, the "heart of the institution." The Association envisages a large-scale, basic program of library development. This will include (1) enriching the collections and increasing library services. (2) developing a library building program (the Association's Buildings Committee is, available to offer advice on modern library building plans), and (8) stimulating and maintaining cooperative projects among librarians, possibly on a regional basis, so that scholarship resources may be economically shared and made more widely available

The program of aid to libraries is farreaching and it is the considered judgment of the Association that the time is ripe for attacking the problems of the pursuance of fundamental research in library science and of the impoverished college library on all fronts. The criteria for aid to libraries had been prepared and the machinery for allocation of funds has been set up and is operating. Adequate funds, are now to be solicited.

Libraries Receiving United States Steel Foundation Grants

Abilene Christian College	\$ 200	Nebraska Wesleyan University	\$ 200
Adelphi College	300	North Central (The College and	
Allegheny College	300	Seminary Library, Naperville, III.)	300
Assumption College	300	Occidental College	300
Athens College	200	Ohio Wesleyan University	1,000
Atlanta University	300	Oklahoma Gity University	300
Augustana Collège (III.)	200	Olivet Nazarene College	250
Aurora College	300	Ottawa University	300
Berea College	300	College of the Pacific	300
Bessie Tift College	100	Pacific Union College	150
Birmingham-Southern College	300	Pacific University	250
Blackburn College	300	Park College	150
Buena Vista College	100	Parsons College	300
Catholic University of America	300	College of Puget Sound	200
Catawba Coffege	100	Randolph-Macon Woman's College	300
Chapman College	100	Redlands University	300
Clark University	300	Reed College	500
Dakota Wesleyan University	300	Roanoke College	300
Doane College	200	Russell Sage College	300
Fairfield University	300	College of St. Catherine (Minn.)	300
Goshen College	300	St. Francis College (Pa.)	300
Greenville College	300	St. Francis Xavier College for Women	
Hastings College	150	(Chicago)	300
Kalamazoo College	300	St. John's University (Minn.)	300
		St. Joseph College (Conn.)	150
Kansas Wesleyan University Kentucky Wesleyan College	150 300	St. Joseph's College (Ind.)	300
Kenyon Colege	300	College of St. Joseph on the Rio Grande (N. M.)	300
Knoxville College	300	St. Mary's College (Ind.)	300
LeMoyne College	300	Salem College	300
Lewis and Clark College	200	University of Santa Clara	300
Loyola University (La.)	150	Seton Hill College	150
Lynchburg College	300	Springfield College (Mass.)	300
Macalester College	150	Sweet Briar College	300
Manchester College	300	Talladega College	300
Marietta College	300	Thiel College	300
Midland College	300	Tougaloo Southern Christian College	300
Miles College	100	University of Tulsa	300
Millsaps College	300	Union University (Tenn.)	300
Monmouth College	200	Ursinus College	300
Mount St. Mary's College (Md.)	300	Viterbo College	150
Mount Union College	200	Wartburg College	300
Muhlenberg College	300	Washington College (Md.)	300
Muskingum College	300	Wilkes College	300
National College of Education (III.) .	300	Whitman College	300
National College for Christian		Willamette University	300
Workers (Mo.)	100	William Penn College	150

A-V Clearing House

Edited by the ACRL AUDIO-VISUAL COMMITTEE



No. 3

Louis Shores, Chairman; Fleming Bennett; Jane Culler; Hudd Gambee; John Harvey; Margaret I. Rufavold; Walter Stone.

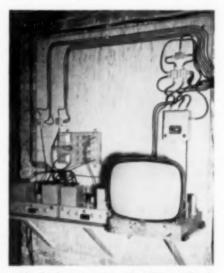
The Library and Closed-Circuit TV

Television, although a familiar adjunct to many libraries, is currently employed in only very limited ways. A small room or alcove is usually equipped to permit individuals or small groups to view commercial and educational telecasts. Such installations are worthwhile, but they hardly begin to exploit the potentialities that TV has for libraries and library schools.

Closed-circuit or captive television is a coaxial cable-connected system which distributes images picked up by a television camera to one or a number of viewing locations simultaneously. To accomplish this feat, home-type TV receivers are employed in combination with revolutionary cameras costing less than one thousand dollars. These are connected by means of cable priced at about six cents a foot. The cable carries negligible current and voltage, and does not have to be run in conduit. This makes for simple and economical installations.

A library located in a college or university might well install a "coax" system between the library and classrooms, laboratories, study halls, the auditorium, and other strategic areas. The cables, terminating in outlet boxes at these locations, permit the quick connection of camera and/or receiver. Outdoor TV antennas oriented to local transmitting stations and wired into the system expand its usefulness to handle such programs. With such a setup, the library becomes more effective as a communications center. Through the use of an inexpensive lens and prism device, known as a Multiplexer, it is possible to distribute motion

picture films on the cable system for reception and viewing in as many locations as is desirable at one time. Also, several films can be electronically transmitted simultaneously on this single cable, with the selection of program desired made through the use of the channel selector switch on the receiver in the classroom. This approach to film distribution eliminates transporting projectors and screens to the various rooms, and permits a single operator to service a relatively large organization from a centralized location. Although



Distribution system for TV at Chicago Teachers College. Thirty-five locations are now connected, with provision for two additional buildings.

synchronized motion picture projectors are used for this purpose in commercial television installations, it has been found through

The Multiplexer used for the pick-up and electronic distribution of films and other visuals.

experimentation that conventional 16mm projectors will work satisfactorily.

It is desirable at the start of each semester to familiarize entering freshmen with the facilities and routines of the library. Through the use of closedcircuit TV it is now possible to seat an entire class in a large

hall to view the TV screen, while the camera is taken on tour by the librarian. Pertinent questions and other desirable interaction between members of the class and the conductor of the tour is provided for through the use of a two-way audio intercommunication system that accompanies the camera. In this way each student has, in effect, a ringside seat to study the important details that are electronically magnified and dramatically emphasized through proper lens selection and camera technique.

Story telling and book review programs of local origin can be distributed on the cable. Similarly, classes in library science can view and discuss, from the vantage points of their own rooms, the procedures and operations customarily in progress at strategic places in the library: processes in the cataloging room, routines at the charging desk, reference procedures, etc.

The current development of the Video Tape Recorder, a device that will permit local recording of the sight as well as the sound signals of any television program on magnetic tape, will soon enable the library to distribute an assortment of the best programs that have been televised. These can be "played back" through a conventional TV receiver for individual viewing, or put on the cable for electronic distribution. The tapes can be preserved or re-recorded as desired.

Space limits discussion, but closed-circuit television appears to have almost limitless

applications for the library.—Philip Lewis, Chicago Teachers College.

Filmographies—A Partial List of Highly Technical Films

The following filmographies on scientific (other than medical or dental) and industrial subjects include highly technical films along with less difficult ones, with enough of the former to make their purchase worthwhile by libraries receiving requests for such films.

 Industrial Film Bibliography, 3d edition (1952) with 1954 supplement, \$2; \$1. National Metal Trades Association, 122 South Michigan Ave., Chicago 5, Illinois.

This is quite a large list and useful to other than firms in the metal trades field. There is a wide range of subjects covered, including aerodynamics, chemistry, electricity and electronics, engineering, hydraulics, metals and metallurgy, and thermodynamics.

2. Plastics, Selected Industrial Films; a list and description of films available to business from industrial, commercial and government sources. 5.50. Office of Technical Services, Business and Defense Services Administration, U.S. Dept. of Commerce, Washington 25, D.C.

This is given as an example of the bibliographies of films and filmstrips issued by the Office of Technical Services. There are also lists on Materials Handling, Time and Motion, Packing and Packaging. Textiles, Safety, Foods and Food Processing, Mining, Refrigeration Equipment, Ceramics, and Leather, All are \$50 each except the list on Building and Construction which sells for \$1.

 The Index of Training Films, 3d ed., including 1954 supplement. \$2. Business Screen Magazines, Inc., 7064. N. Sheridan Road, Chi-



Use of closed-circuit TV for orientation to the library. Explanation of the microreades.

cago, Illinois. A "listing of more than 2900 . . . industrial and technical motion pictures and stidefilms." . . . Includes films on such subjects as aerodynamics, ceramics and glass, chemical industry, electronic theory, electrical measurement, hydraulics, metallurgy, optics and photography, and thermodynamics.

There are many films of a highly technical nature, especially those produced by the Department of Commerce and the Department of Defense, listed in 3434 U. S. Government Films, Bulletin 1951, No. 21, of the Office of Education. This is available for \$.70 from the Superintendent of Documents, U. S. Government Printing Office, Washington 25, D.G.

The NEMA Movie Guide which is issued by the National Electrical Manufacturers Association, 155 East 44th Street, New York 17, N.Y., is a compilation of over 400 16mm films selected for their educational value in the electrical field. The majority of these are of a popular nature, but there are some listed under electricity and magnetism, electronics, radio and television, and X-rays which are of some technical difficulty.

Not to be overlooked are the Educational Film Guide published by The H. W. Wilson Company and the Educators' Guide to Free Films published by Educators' Progress Service, Randolph, Wisconsin. The former lists over 15,000 titles in its basic 1955 volume and current supplements; the latter, 2982 films distributed by manufacturers, associations, government agencies, etc.

Look and Listen, a British audio-visual publication, carried a note in its November,

1954, issue stating that:

The British Universities Film Council has now completed the cataloguing of 600 films considered to be of value in university-level teaching and research... A List of Titles has now been issued classifying all of the 600 films in subject order... and also in alphabetical order. This "Green List," as it is called, may be obtained from the Catalogue Secretary, Royal Technical College, Glasgow, price 1/6 post free. Copies of Index Cards are available from the same source at one penny per card, minimum 2/6.

Forrest Alter, Librarian Film Council of America

New ACRL Publications Officer

Mrs. Cynthia Spigelman resigned as ACRL Publications Officer on October I. Her place has been taken by Samray Smith, who was until recently editor of publications in the ALA Publishing Department. Before coming to ALA Mr. Smith worked in several academic libraries, including those of Stephens

College, the University of North Carolina, Emory University, and Guilford College, where he was also an instructor in the English department. He is a graduate of Guilford College, with an M.A. from Haverford College and an A.B. in L.S. from the University of North Carolina library school.

Corrections

Mrs. Thelma V. Taylor of the Los Angeles Harbor Junior College Library, Wilmington, California, is the new Chairman of the ACRL Junior College Libraries Section. Catherine Cardew was incorrectly listed as Chairman in the October, 1955, issue of CARL.

In the article, "Microfilming Services of Large University and Research Libraries in the United States," by Robert H. Muller, in the July, 1955, issue of CARL, Table I, page 261, it was noted that the Armed Forces Medical Library owned 16 cameras. This should have been printed as 6 cameras.

Notes from the ACRL Office

This January issue, the first for Volume 17, is the first bimonthly Carl and also introduces our new printer. The Ovid Bell Press, Inc., of Fulton, Missouri. The new cover, type, paper, format, etc. all represent problems which have been studied and wearily discussed for nearly a year. If the final solutions are attractive, much of the credit should go to Mr. Bell, who has been wise in counsel and patient in explanation. The much-discussed ACRI. Organization Manual has been delayed because of Mrs. Spigelman's resignation on October I. The Manual is at last in the press and should be mailed to all members during February.

I have just prepared "A Program for Grants to Assist College Libraries and a Report on the United States Steel Foundation Grant of 1955." As the title indicates, this reports our stewardship with funds already given and states our program for the future. It is designed to interest corporate foundations, industry and other sources of grants in the support of college libraries

through ACRL.

There must be some personal contact with prospective donors in a presentation of the special needs of college libraries. No document alone will bring important results. I am making contacts as time permits, principally in Chicago and New York. Many of you who read this column have friends who are leaders in the industries and foundations which now support higher education or will be doing so. Please don't hesitate to request copies of this report for your own use and for passing on to an acquaintance who may be able to turn a modest grant toward ACRL. The Association offers an important service to donors as well as libraries in providing national distribution of funds where the most good will be accomplished. Our cause is just, our position sound, our presentation convincing. We need only membership cooperation in placing our story in the right hands.

I am looking forward to doing brief library surveys for Nebraska Wesleyan and Park colleges in the spring. While some large universities may have had too much of the efficiency experts and management analysts in recent years, there are many college libraries which need a sympathetic, enlightened examination of problems and thoughtful recommendations for the improvement of the library's role as an instrument of education. A survey helps me to keep in touch with practical problems. I am also interested in this type of experience because I believe ACRL should promote this professional service.

The ACRL Board of Directors has always encouraged me to spend a good deal of time in the field at library and educational conferences and in visiting libraries. Conferences attended this fall include Mountain Plains at Jackson Hole, Wyoming; Kansas at Pittsburg: Tri-State (Indiana, Ohio and Kentucky) at Cincinnati; Illinois, in a nearby Chicago hotel; and the Eastern College Librarians Conference in New York. On several occasions I spoke informally about ACRL. For the New York conference it was necessary to prepare a formal paper. "A Statistical Summary of Library Personnel Now and for the Future," which will probably be published with other conference papers as an ACRL Monograph.

Relatively few libraries have been visited this fall because of time consumed by the ACRL grants program. As evidence of the increased load of correspondence here, our year's supply of envelopes was nearly exhausted in five months. I hope to visit more

libraries in 1956.

At Midwinter and Annual Conference any executive secretary's schedule is filled with committee and other meetings, normally from 8:00 A.M. to 11:00 P.M. Personal and informal group contacts are limited to meals and the time before and after eating. While attendance at a good many meetings is absolutely required, this year I am scheduling Wednesday (February 1) afternoon and evening in the Edgewater Beach west lounge. Come by then for a brief chat if you can. I regret very much that the pressure of business at previous conferences has often been allowed to take precedence over a modest amount of informal membership contact. -Arthur T. Hamlin, Executive Secretary

College and University Library Statistics, 1954-55

Mr. Bentz is associate director of the State University of Iowa Library and chairman of the ACRL Statistics Committee.

This year the ACRL statistics have taken on a new look and the data have been reproduced from typewritten copy. All libraries, therefore, which were willing to submit reports and which could do so by the deadline have been included even though there are still many gaps in the information supplied.

Seventy-eight per cent of the ACRL membership which responded to the questionnaire sent out with the official ACRL ballot last year favored a separate publication for the statistics. However, the ACRL Board of Directors, meeting at Philadelphia, felt that the statistics should be made available to the general membership without charge.

Several changes were made in the reporting form used in collecting the 1954-55 data. A column was added to include the total of audio-visual expenditures from library budgets. Although it was realized that many libraries do not have separate audio-visual budgets or do not keep separate records for these expenditures, the committee felt this additional, special information might be useful to some librarians.

The number of hours and days in the work week included last year has been changed to the number of working hours in the fiscal year for a professional librarian. This is an attempt to correlate the salaries paid with the length of the work year, excluding vacation and legal holidays.

Ambiguity exists in the total enrollment figure which is requested. To maintain uniformity in reporting these data, the committee asked that the total enrollment correspond to the figure reported to the U. S. Office of Education and published in Fall Eurollment In Higher Educational Institutions, 1954. Both Miss Field and Mr. Erickson comment on this problem in their summaries.

Libraries were divided into five categories. Group I consists of those institutions with particularly strong graduate programs. The size of budget or student enrollment was not the determining factor here, as it was between Groups II and III where a total operating budget of \$35,000 was arbitrarily chosen to divide the two groups. Unfortunately, the committee does not have all reports in hand at the time the division by groups needs to be made. The junior colleges are included this year as part of the ACRL statistics. Although all types of libraries should be included, there is some doubt that the ACRL questionnaire is adaptable to this group. Perhaps different information would be desirable for certain groups of libraries.

The ACRL statistics this year were compiled by members of the committee and they represented, with one exception, each type of library included in the respective groups. A tremendous amount of time is required to audit, interpret, and compile this mass of information and the members of the committee who were responsible deserve much credit for their service to the Association. Some observations of each compiler are given below.

Group I: Compiled by F. Bernice Field Head, Catalogue Department, Yale University Library

One hundred and seven libraries in Group I returned questionnaires this year, including 69 of the 70 whose reports were published last year, 14 listed in Group II last year, and 24 additional ones. All but seven gave some salary data.

The difference in the way statistics are kept in the universities reporting makes comparisons difficult. The enrollment figures for some institutions, for example, include students registered in extension or off-campus courses, part-time students, or noncredit ones; others report only full-time students. Although off-campus and part-time students do not make as much use of the library as those who are full-time and on the campus, in many reports they have been considered in computing the per student expenditure for the library. Since the professional schools are on a graduate level in some universities and an undergraduate level in others, any comparison of these figures is not meaningful.

In general, library budgets show an increase over last year's figures. The salaries paid beginning professional librarians continue to rise, the median having increased from \$3,200 to \$3,336 in the past year. Other medians have increased accordingly, as the tables show.

Group II: Compiled by Joseph N. Whitten

Librarian, Cooper Union Library

Questionnaires were sent to 161 colleges in this group and responses were received from 78. All reports were used except one where there was an unusual complication in the figures submitted. Medians were determined for all items of each category where the response was clear, and all colleges were included regardless of the amount of salary information submitted.

Group III: Compiled by Clarence Gorchels

Acting Assistant Director, Washington State College Library

On hundred and twelve questionnaires were returned for Group III libraries this year. It is noteworthy that a good majority of the librarians who returned the questionnaires answered faithfully all of the questions applicable to their libraries. A large number of blanks appear in some columns of the published reports, but some of these are due to the nonexistence of appropriate information.

Teachers Colleges: Compiled by Walfred Erickson

Librarian, Michigan State Normal College, Ypsilanti, Michigan

In using this year's compilation of statistics for comparative purposes, one must remember that the enrollment figures include both on-campus and off-campus students. Although a uniformity in reporting was achieved through the use of this figure, since it was also the statistic used by the U. S. Office of Education in the fall of 1954, it fails to provide comparable data in some cases where per capita expenditures are concerned. The college with a disproportionately large extension program will appear to be spending relatively little per student for library purposes.

Another statistic which must be considered cautiously is that referring to size of library staff. It is difficult to know from many of the reports to what extent full or part-time library science instructors or audio-visual specialists are included in the total library staff.

The 90 libraries included in this compilation represent a 50 per cent increase over last year. Twelve returns were not included in the published statistics for various reasons.

Junior Colleges: Compiled by Ruth E. Searborough Librarian, Centenary Junior College

Junior College library statistics for 1952-53 were published in the November, 1953. issue of the Junior College Libraries Section News-Letter which contained data on 50 junior colleges. The 1953-54 information for 109 junior colleges was published in the January, 1955, issue of COLLEGE AND RE-SEARCH LIBRARIES, pages 75-75. This year the junior colleges are included with other colleges and universities and are arranged alphabetically by states with the thought that this arrangement will be helpful to the junior colleges in each state or region for purposes of comparison and information. Seventy-five junior colleges in 26 states are represented in this compilation.

In compiling the data, a number of columns were omitted for which so few figures were reported that they serve no purpose.

College and University Library

										Library	
	Library	Year	Total Under-	Enrollment Total Graduate		Volumes Added	News-	Period- icals	Staff Salarios	Student Service	Total Staff Salaries and Student Service
1	Alabama	10Je55 30Je55 31 My55	6,212 5,399 3,677 4,716 5,124	479 354 367 410 1,348	492, 420* 264, 232 335, 479 207, 879 443, 526	21,672 10,125 14,607 8,745 13,548	111 49 36 45 20	3, 554° 2, 173 1, 260 1, 502	\$160,436 79,944 83,133 59,205 82,851	\$ 25,434 22,104 14,090 26,000 15,839	\$ 185,870 101,648 97,221 85,295 116,190*
6 9	Button University	51 Mr55 10 Je55 10 Je55	6, 351 5, 589 15, 881 2, 975 11, 996	657 325 1,399 400 3,861	481,818 304,000 254,619* 836,159* 2,063,082*	12,061 17,823 16,506 19,429 82,315	174 25 6 20 257	3, 226 4, 007 673 6, 616 ^a 24, 491 ^a	185, 349 177, 658 165, 133 156, 495 1,209, 267	23,494 5,710 43,048 21,886 220,226	200, 843 183, 568 200, 181 173, 381 1, 429, 493
83 84	California (Lee Angelee); California Inst. of Tech. Catholic U. of America Chicage Cincinnati	30 Ja55 30 Ja55	10,505 529 1,601 1,600** 12,317	1,611	1, 114, 876 96, 292° 498, 669 1, 911, 111° 727, 610	63,199 4,690 13,990 47,262 17,494	275 21 17 93 27	15,624° 1,900 3,493° 6,014 2,014	660,620 63,560 119,937 394,064 152,053	196, 121 2, 756 105, 667 11, 809	856,741 66,310 121,437** 499,671 164,662
16	City College (N. Y.) Clark	10 Je55 10 Je55 10 Je55	21,578 656 7,550 3,764 10,097**	2, 923 149 670 223 15, 263°	431, 160° 192, 479 864, 937° 173, 167 2, 116, 641°	14,153 2,350 31,712 4,087 65,537	50	1,172 904 4,764 3,346 10,475	289,636 20,803 143,140 58,851 677,340	39, 945 5, 136 36, 460 8, 090	324,501 25,939 179,600 66,941 87,360
23	Cornell	10 Je55 10 Je55 15 Je55**	6,820 2,716 1,891 4,476 7,931	1,416 216 151 1,046 575	1, 745, 9874 739, 4396 209, 6764 518, 7614 167, 572	74,742 23,997 10,833 8,626 11,857	45 15 1, 269 20	11,672 2,502 830 1,742 1,192	561,127 175,468° 72,800 77,709° 61,004	5,600	631,640 184,647 70,400 85,751 ²⁸ 74,172
29 29	Drake	10 Je55 10 Je55	4,529 6,214 3,400 6,537 4,822	607 742 1,611 1,325 816	145, 239° 127, 127 1, 198, 497° 637, 516° 409, 755	4,830 6,012 49,757 67,430 29,820	9 3 64 148 98	821 891 3,920 5,289 3,268°	47,923 40,918 244,858 341,069 209,634	12,646 4,093 29,740 58,648 9,500	60,569 45,811 274,598 399,757 219,134
8.0 8.9 8.4	Fordkarn	10 Je 55 10 Je 55 10 Je 55	7,500 4,581 4,472 4,430 4,692	1,610 482 220 5,934 5 672	312, 293 324, 896° 162, 899 1, 959, 766° 256, 651°	13, 820 14, 105 20, 043 10, 752	76 12 33	1,280 2,862 2,261 	119,768 155,246 100,164 ,100,154 100,133	16,000 10,009 11,267 95,000 9,170	137,764 165,335 119,431 1,195,154 117,511
19	Houston	10 Je 55 10 Je 55	11,070 11,217 19,153 10,377 6,594	1,889 883 3,066 2,120 1,820	145,379° 191,966 ,888,557° 976,909 869,585	18,034 6,070 113,294 35,569	173	1,010 630 14,000 11,657° 4,934	105,130 111,056 857,016 375,150 251,628	31,661 36,777 89,868 46,850 47,372	136, 791 147, 823 946, 884 422, 000 299, 000
01	Inwa State Juhne Hopkine Junt Unaversity Kanses Kanses State	19.Ja55	7,414 6,622 3,185 6,678 5,000	894 1,223 1 1,327 925 185	451,444* ,060,365 666,510* 646,110* 194,004*	12, 205 18, 161 23, 142 45, 505 10, 343	35	2,732 4,300 4,120 0,147° 4,100	151, 153 193, 469 129, 004 226, 875 93, 972	19,724 12,841 30,769 50,456 21,400	170,877 206,310 155,851 277,331 115,372
46.	Kentocky	10 Je55 16 Je55 10 Je55	5,797 2,607 8,091 5,970 2,976	628 536 1,171 472 92	681,749 317,364° 656,639° 251,109° 268,371	31,009 9,410 32,106 7,340 7,819	102	3,449 2,912° 6,136° 2,145 1,495	159, 384 51,000 281,760 83,979 32,864	15, 124 7, 860 35, 949 10, 976 10, 113	174,508 58,860 316,800 94,055 43,363 ²⁶
52. 53.	Massachunetta	0Je55 0Je55 1My55	12,693 3,701 3,401 9,910 11,384 ^m	2, 441 310 1, 067 555 7, 116 to 2	299,643 194,729 557,120* 379,807° ,325,294°	16,601 5,125 33,907 25,049 75,724	18	3,411 1,161* 2,747 Z,776 0,000**	162,179 46,604 162,036 172,015 783,946	24,075 5,004 19,924 19,580 114,752	186, 254 51, 608 181, 960 191, 595 898, 698
59.	Michigan State	0Je55	15,408 17,340 2,200 2,820 7,242	2,125 3,059 231 260 841	765,604° ,791,047 201,112 177,551° 721,150°	80,681 63,705 9,046 5,841 17,500	40	4,992 0,145* 1,787* 1,329 2,500**	166, 331 504, 457 52, 069 55, 533 120, 704	65,000 107,663 16,392 8,016 21,600	236, 331 ⁴⁹ 612, 120 68, 461 63, 549 142, 304
63.	Montana	0Je55 0Je55 0Je55	2,208 2,221 6,567 1,725 2,880	191 95 630 38 169	161,524 100,935° 554,023 100,664 224,861°	4, 723 4, 142 18, 485 4, 989 14, 260	35 66 26	1,060 2,048* 5,640 985 1,301	55,910 47,747 221,104 35,900 69,227	10,000 7,160 34,724 5,000 10,500	65,910 54,907 255,908 41,708 79,727
68.	Now Monico	0Ja55 0Ja59 0Ja55	3, 921 10, 919 4, 474 3, 946 16, 414	771 13,425 to 1, 1,348 332 1,569 to 1,		11,703 20,690 74,564 9,714 44,166	25 78 38	5,901° 5,000° 3,770 1,803 3,279°	01,000 430,652 302,355 81,223 310,962	10, 263 40, 923 10, 277 94, 525	100, 151 438, 652 343, 270 91, 501 365, 487
92. 93. 94.	Notro Dame	0Je55 0Je55 0Je55	5,040 1,836 17,627 9,056 3,807	103 205 2,722 1,063 631	403,719 517,969° 103,303° 530,970 552,171°	21, 235 8, 974 50, 448 28, 545 21, 024	68 1 324	2,492 1,076 0,526* 4,610 3,625	114,585 79,673 447,932 164,768 186,802	27,849 21,072 61,475 26,754 16,989	142,434 100,745 509,407 191,522 203,791
77. 78. 79.	Oregon State	0Je55 0Je55 0Je55	4,807 10,531 12,937 12,086 2,948	3, 425	431, 314° 703, 229°	17,628 12,457 29,422 19,573 34,219	110	2, 875 6, 493 4, 971 4, 183 5, 000*	112,674 472,555 221,830 184,055 320,836	57,698 29,842 59,448 11,000 26,291	170, 572 502, 397 281, 270 199, 055 347, 117

Statistics, 1954-55 Group I

Statisti	ics, 195	4-55	Group I				Ratio of		
Books and Related	00	Total for Books and	Other Operating Expendi-	Total Operating Expendi-	Per Student Operating Expendi-	Total finatitutional	Library Ex- penditures to Total Insti- tutional Ex- penditures	Total Audio-Visual	
Materials \$101,282 48,513 53,309 40,000 48,895	Binding \$21,727 11,863 6,947 10,000 3,616	Rinding \$123,009 60,376 60,256 50,000 52,511	\$ 17,080 9,274 6,746 24,859 15,348	\$ 325,999 171,298 164,223 160,064 186,049	\$ 48.72 29.77 40.70 31.23 28.43	Expenditures \$ 6,330,658 5,001,539 4,119,048 2,033,600 2,732,937	(Per cent) 5.1 3.4 4.0 7.8 6.7	Empenditures 1,990	3 4 5
70,036 108,627 37,143 77,906 190,177	14, 019 22, 652 6, 794 16, 605 91, 340	04,055 131,279 43,937 94,511 461,517	10, 051 14, 707 5, 579 31, 224 164, 510	303, 749 329, 834 257, 697 304, 116 2, 015, 520	33,72 55,77 14,91 90,11 127,10	9,554,644 5,845,188 7,625,886 4,474,036	3. 2 9. 6 3. 4 6. 8	* * * * * * * * * * * * * * * * * * *	9
102, 625 36, 372 45, 321 145, 921 63, 860	90, 700 5, 429 5409 39, 093 12, 796	383, 325 41, 001 45, 061 185, 014 76, 656	85, 999 8,661 15, 017 33, 381 5, 925	1, 325, 965 116, 772 182, 315 718, 966 247, 243	95.09 122.14 51.88 102.00 10.04	17,977,907 6,475,809° 3,163,207 26,446,782° 8,174,933	7.3 1.8 5.0 2.7 3.0	451	111111111111111111111111111111111111111
69,728 16,000 81,603 18,043 288,774	9, 913 1, 642 12, 084 6, 070 65, 300	79,641 17,682 93,687 24,113 354,074	9,581 2,520 8,254 7,427 56,731	413,803 46,141 281,541 98,481 1,288,145	16.69 57.32 34.25 24.70 50.79	10, 526, 576 818, 291 6, 822, 287	4.0 5.6 4.1	750 1,401	16 13 16 19 26
209, 433 67, 449 67, 405 27, 754 = 39, 753	52, 286 16, 297 2, 862 4, 727 0 9, 500	261, 719 83, 746 70, 267	51,770 11,889 6,500 5,074 P 4,293	945,129 280,082 195,167 123,306 127,718	79.41	29,576,520 4,674,035 4,236,409 2,734,437 m 3,593,727	3, 2 6, 0 3, 7 4, 5	1, 160 6, 754 2, 710	21 23 23 24 29
19,592 176,464 122,037	3, 200 2, 824	22,782 18,664 191,177 201,287 138,528	3,679 2,851 17,824 35,682 21,233	87,026 67,326 483,599 636,726 378,894	16.68 9.66 96.51 64.54 68.97	1,772,267 2,550,000 0,025,050 15,452,136 6,696,495	4.9 2.6 6.0 4.1 5.6	25 ↔ 2, 150	26 27 28 29
56, 460 58, 335 56, 325 454,655 46, 212	7, 360 9, 990 13, 055 111, 360 10, 633	63,820 60,325 69,380 546,015 56,845	8,965 10,166 10,724 292,994 7,094	199,535	22.89 48.16 42.53 196.27 33.83	4,950,000 1,928,042 4,026,857 36,501,762 4,777,864	4, 8 6, 3 4, 9 5, 6 3, 8	2,666	31 32 33 34 35
82, 314 35, 273 215, 650 130, 611	5,140 3,717 44,200 27,621	87,454 38,990 448,995 262,850 166,232	16,815 1,170 47,235 21,050 25,261	241,060 187,993 1,443,114 706,700 490,493	18.60 15.54 65.00 56.53 58.29	4,625,000 5,658,807 48,505,637	5. & 5. 3 3. 0 4. 5	19,481	34 37 38 39 40
69,995 66,425 74,067 211,025 58,000	30,069 17,522 19,277 20,328 5,000	100,064 83,947 09,344 231,353 63,000	10,137 29,000 11,376 44,743 1,448	281,078 319,257 256,573 553,427 179,820	33,03 40,67 56,86 72,79 33,39	5, 612, 164 9, 775, 753 8, 311, 360	2.2 4.4 5.7 2.2	12,7930	41 41 41 41
79, 703 60, 600 173, 213 38, 350 23, 129	17,865 8,880 22,092 6,427 3,629	117,568 49,480 195,305 44,777 26,754	8,894 6,460 22,868 5,954 974	370,970 114,800 534,973 144,786 71,091	47.10 36,52 57.74 22.45 23.17	3,418,091 16,000,544 2,747,090 4,241,792	3, 3 3, 3 5, 3 1, 7	631	41 41 41 41
105,031 32,562 39,241 112,623 287,605	12,812 627 12,090 15,636 46,159	117,043 33,109 51,339 128,259 333,764	9,625 3,192 9,119 13,482 56,810 ***	313,722 67,989 242,418 353,336 1,289,272	20.73 21.51 49.32 31.78 68.86	19,241,764 6,004,416 22,603,501 6,445,791 39,924,421	1.6 1.4 2.0 9.8 0.3	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	51 51 54 51
163,889 271,950 13,990 17,633 90,765	15,000 61,300 6,449 6,435 24,603	178,889 333,338 20,447 26,068 116,368	20,000 52,114 3,237 5,446 20,777	435,220 997,572 92,145 95,063 278,449	27.87 49.90 36.69 30.86 34.40	37, 128, 940 2,605,484 7,969,765 11,577,398	2, 7 3, 5 1, 1 2, 4		91 91 91 91
19,842 18,000 108,198 15,000 24,515	5,337 4,500 15,456 5,108 5,613	25,179 22,500 123,654 20,100 30,128	3,037 2,610 21,607 1,200 74,574	94,126 80,017 401,169 63,016 184,429	37,97 34,55 93,74 35,74 60,49	3,860,324 12,246,873 2,190,877 3,816,725	2. 0 3. 3 2. 9 4. B	010 0,145	61
45,238 100,936 192,487 69,701	8,626 17,971 18,451 8,993	53,864 118,907 210,938 78,694 188,620	5,564 45,104 35,277 4,307 40,578	159,579 602,663 589,494 174,502 594,685	34.01 15.29 101.25 49.79 56.50 **	3,101,834 28,407,124 13,194,745** 5,761,346	5. 1 2. 5 4. 4 ^{sq} 3. 0	6,769	61 61 61 71
99, 691 24, 726 204, 635 136, 844 88, 740	11, 209 5, 997 15, 000° 19, 433 11, 649	110,300 30,723 219,635 156,277 100,309	7,844 9,400 29,387 21,849 16,976	260,658 136,868 758,429 369,639 321,156	47,89 66,99 37,27 36,53 72,36	6,755,000 2,972,710 31,915,649 5,910,881 ** 3,995,108	3. 0 4. 6 2. 4 6. 2 m 8. 0	4, 367	71 71 71
57,049 174,503 127,906 85,944 132,842	17,552 38,331 15,351 5,000 21,515	75,501 212,634 163,257 90,944 154,357	10,468 26,307 17,433 11,114 27,514	256, 341 741, 538 441, 968 301, [13 538, 988	48.71 46.94 30.96 19.41 154.77	9,944,832 10,402,688 10,794,614	2.9	128 801 8,009 4,326	74 71 74 74

College and University Library Statistics,

										Library	
	Library	Fiscal Year Ending	Total Under-	Total Graduate	Book		News-	Period-	Staff Salarina	Student Service	Yotal Staff Salaries and Student Service
	Purdue	30Je55	8,742	1,826	375, 140*	21,376	22	5,468	191,808	\$ 16,924	\$ 228,712
	Blinds Island		1,996	192	139,804	9,056	7	1,001	10,528	3, 973	42,501
	Rice		1,480	204	263,862	15,692	10	2,6850	71,217	18,750	89,967
	Rochester		4,634	815	596, 914*	18,993	55	3, 276	170,550	21, 332	191,872
85.	Rutgers	30.7×55	5,436×	1,946%	726, 437	28, 437	30	3,000	325,808	22, 280	348,088
84	Saint Louis	11Ag55	9,491	1,274	510, 953	20,676	5.3	1,592	\$116,599	9,149	145,749
87.	South Dahots	30 / 255	1,396	106	152, 491	5,300	1.5	1, 396	37,652	7,266	44, 918
	Southern Illinois		5,150	291	168, 545	13,113	62	2,046*	97, 320	14, 248	111,568
	Bouthern Mathodiat		5,010	1,230	192,7714	20,777	3.8	1,764	107, 607	13,808	121,695
	Syracuse		10,441	2,487	196, 450*		15	2,850	162, 285	28,466	190,751
91.	Temple	10 Ju 55	10,699	3, 065	412, 5341	22, 207	2.2	2, 841	184,781	19,414	204, 195
	Tennosseo		7,593	1,163	391, 331	22,679	4.5	3,557	188, 234	11,090	199, 930
	Texas		11,805		1, 132, 128	40, 111	3.2	6,500*	287,420	87,021	574, 441
94	Tonas A. & M	31A#55	5,827	419	283, 210*		51	3,6860	117,418	11,475	130,891
95	Tules	11 My 55	3, 337	420	161,500*		21	800	39,123	12,202	51, 325
96.	Utah	30Ja55	6,886	911	324, 247	16,854	54	5,951*	94,537	40, 310	134,847
97.	Vermont	30Je55	2,516	345	200,0001	4,644	10	1,400	70,650	7,100	77,950
98.	Virginia	30 Je55	3, 214	544	765, 277	39,160	128	3,980	236,460	23,617	260,077
	Washington (St. Louis)		10, 191	1.209	594,055	15,924	0		153,909	10,802	184,711
190	Washington (Seattle) -	10 Je55	11,031	1,844	865,002	21,547	235	9,851	417, 209	79,805	497,014
	Washington State		4,710	474	650,000*	15,300	206	5,100	188, 366	28,218	216,584
	Wayne		14,416	2,880	517, 356	38,782	111	3,693	329,880	57, 982	387,862
103.	West Virginia	30 Ju55	4,914	597	101, 186	17,841	78	1,986	138,546	22,688	161, 234
104.	Western Reserve	10 Je 55	6,809	1,163	701, 3230	29,441	9	2,285	163,300	26,692	190,080
105.	Wiscondin M	10 Ja55	10,576	5, 376 ex	997, 1461	49,250	20	11,840*	430, 153	87,456	525,609
10è.	Wyoming	10.7e55	2,220	230	190,087	7,595	5.5	1,400	51,060	12, 145	61, 205
107,	Yalo	303059	3,782 "	1.055**	8, 280, 4751	56, 280	540	5, 230 **	653,469		651,469
	High		21,570				1, 269		, 209, 267	220,226	1,429,491
	Median		5,410	816	631, 314	17.841	69	5, 332	156, 499	21,400	174,508
	Law		529	3.6	96, 292	2,350	3	6.30	26,861	2,750	25, 939
	24		107	107	107	105	104	106	107	101	107

I. Central liberry and all agencies. Z. Resident and special suidents (soe person counted twice). L. Includes supplies, transportations, and all other non-capital expositives not specifically reported. & Eschwive of capital expositives and those for auxiliary enterprises such as downstories, refeteries, etc. S. Includes documents. 6. Includes certais, T. Eschwie Medicine, Pharmacy and Nursing Schoules. S. Includes Str. 500 nonalaried service. S. Not reported ur not available. B. Eschwies Medicine, Pharmacy and Nursing Schoules. S. Includes \$17,500 nonalaried service. S. Not exposted ur not available. B. Eschwies expenditures for organized research at off-campus locations. H. Includes documents. S. Eschwies Si, 500 nonalaried service. B. Off-campus binding only. I. Estimate. B. Eschwies government configures. B. College of Pharmacy except for enrollment figures. B. Includes students from affiliated institutions served primarily by separate library facilities. B. Eschwies bindery staff of 5 persons. 28. September, 1994 to Jone 19. 1995 (9-1)2 months only). Th. Eschwies Gavern Library. The location devices and service. The location binders and services. The location binders and services are served primarily by separate library facilities. B. Eschwies binders and the service of the location Library. The location devices are served primarily by separate library facilities. B. Eschwies binders of the location Library. The location devices are served primarily by separate library facilities.

College and University Library

	Library'	Labration	Chi	Assistant et Libraria Masimum	in.	Depai	rtment Hea Maximum	da Number	Sci and (F	od Libraria looi, Colleg Department rofestional Maximum	ge stal
3	Alabama Arkanasa Arkanasa Baylor Boston College	7,500	5,500 6,100 5,500	*	1	\$4,000 4,100 4,500	\$6,000 5,000 4,650	3 3 3	\$ * 4,100 3,600 4	\$ 4,500 6,20	4
8.9	Boston University British Columbia Brooklyn Brown California (Berbeley)		7,728	9,852	12	6,400 3,550 3,960 4,092	4,700 6,650 6,000 10,092	4 8 5 26	3, 120	3,960	3,
13.	California (Los Angeles), California Inst. of Toch. Catholic U. of America Chicago Cincinnati	13,200 6,000 8,568	7,008 4,100	8,520 4,200	1 2	6,360 1,600 3,100	8,520 4,450 4,120 5,400	5 2 6 10 4	1,720 1,400 3,000	8,520 4,100 3,720	11 4 8 15
17.	City Coilege (N. Y.) Clark Calorado Celorado A. & M. Celumna.	10,650 5,400 9,300 6,600	7,090 6,700 5,200	8,018	2	6,146 5,860 6,272 3,720** 3,750	6,650	8 1 9 1	4,716		1

1954-55 Group I - Continued

	Ope	erating Expans	litures		Per		Labrary Ex-		
Bucks and Related Materials	Binding	Total for Books and Binding	Other Operating Expendi- tures	Total Operating Expendi- tures	Student Operating Expendi- tures	Total [matitutional Expenditures	Total Insti- tutional Ex- penditures (Per cent)	Total Audio-Viena Espenditures	
\$118,109 25,519 49,171 82,557*	\$16,401 1,229 10,000 13,988	\$154,672 28,768 59,171 96,645 119,528	\$ 28,466 7,772 7,500 11,536 17,450	8 191,870 79,041 156,638 299,953 485,058	\$ 17,08 37,49 93,61 55,00 37,31	\$19,650,455 3,821,426 1,900,000 16,206,217	2, 0 2, 1 8, 2 3, 0	\$26,146.7	81 83 84 85
56,094 24,519 76,299 68,452 59,617	8,504 5,162 7,500 8,319 10,334	64,586 29,681 85,793 76,771 69,951	8,482 3,319 9,473 6,773 9,621	218,619 77,918 207,034 205,239 265,963	20.52 51.87 38.05 52.89 20.57	1,566,021 4,315,367 1,520,248	5.0 4.8 6.5	1,447	86 87 88 89 96
73,352 103,737 172,726 86,169 22,955	10,079 12,162 26,276 10,002 2,213	83,431 115,899 199,002 96,171 25,168	12,518 10,440 29,249 9,662 6,457	300, 144 326, 269 602, 692 236, 726 82, 950	21.81 37.26 37.84 37.90 22.03	7,499,898 11,505,004 5,388,258 1,443,640	4.0	1,084	91 92 93 94 95
84,400 22,293 102,725 92,886 169,421	14,000 6,130 19,775 14,413 31,025	98,400 28,420 122,500 107,299 200,446	8,722 6,300 20,570 41,094 28,145	241,969 112,670 411,147 333,104 725,605	31.03 39.38 109.00 29.22 53.00	9,058,254 4,036,469 6,000,000° 30,016,356 14,530,648	2. 7 2. 6 6. 0 5. 3 5. 0	3, 076	97 98 99 100
58, 207 152, 606 58, 942 66, 450 168, 697	10, 775 17, 558 9, 149 10, 144 41, 898	68,982 170,366 68,091 76,594 210,595	12, 292 29, 139 12, 951 16, 966 15, 709	297, 818 583, 565 242, 276 283, 646 771, 913	57,40 33,85 43,96 35,58 55,32	11,081,962 6,720,745 7,279,446 25,347,038	4.5 3.6 5.9 2.0	60, 990 M	101 102 101 104 109
28, 171	7,096	35,467 407,647	3, 8%	102,568 1,061,116	41.86 144.00	4,377,868 20,109,822°		1	106
414,655 69,995 13,998	111, 360 11, 649 540 102	546,915 85,791 17,682 107	292, 996 11, 376 974 106	2, 034, 263 280, 082 46, 141 107	196,27 39,30 9,66 106	48,505,637 6,445,791 610,291 91	8, 2 1, 0 1, 1 94	60,000 2,150 25 29	High Median Low N

only. 25. Includes professional students. 26. Encludes Law and Business Administration libraries. 27. Includes \$5,000 nonsaistried earvice. 26. Encludes Law and Medicine Libraries. 27. Encludes School of Mines and Metallurgy. 26. Encludes Law
saistried earvice. 27. Encludes Law and Medicine Libraries. 27. Encludes School Library. 31. Encludes Law
school Library. 31. Endenthody also includes 5,954 non-credit and 1,103 off-campus students, making a total of 39,401.

27. Includes part-time students. 32. Evanston campus only. 35. Includes saistries. 36. Encludes Library. 30. Includes
special control of 13,000. 37. Includes \$20,000 nonealaried service. 38. Eacludes Wisconsin State Historical Society Library. 39. Includes
law and medicine students. 46. Encludes Law Library. 46. Studenth body size includes 395 not candidates for degrees, making
total of 7,412, of which 63 are registered in both graduate and undergraduate schools. Final total 7,359. 42. For Starling
Memorial Library only. 43. Dormitory costs not separable.

44. Number of libraries on which high, median and low are based.

Salary Statistics, 1954-55 Group I

	har Professi	onal		onprofessio		Full-T	ime Equiva Nonpro-	lent	Working Hours in Fiscal	Hours of Student Assistance	
Minimum	Maximum	Number	Minimum	Maximum	Number	fessional	fessional	Total	Year	Wastermood	
\$2,700 3,275 2,700 3,200	\$4,000 3,900 3,750 4,000	20-1/2	\$1,700 2,400 1,440 2,000	\$2,700 3,475 2,040 3,200	14 10 12 15	39-1/2 15-1/2 17-1/4 10 21	14 10 11 5-3/25	92-1/2 23-1/2 20-1/4 15-3/25	1,000° 1,024 1,056 1,840 1,040	50,000 27,150 24,880 38,000 22,000	3 4 5
2, 992 3, 550 3, 000 3, 720	4,152 5,500 4,500 7,176	19 14 13 99-1/4	1,604 1,645 1,800 2,640	3, 312 5, 290 3, 900 6, 516	19 12 39 177-4/5	10 26 25-1/2 21-11/19 130-1/4	40 39 20 39-3/2 178-4/5	78 65 49-1/2 61-3/38 309-1/20	1,634 1,750 1,400 1,724 1,824	23, 339 7,614 22,941 21,186 175,341	6 7 8 9 10
3, 720 3, 000 3, 336	7,008 3,720 4,200	66 7 25 8	2,649 2,280 1,989 1,992	6,360 3,900 2,700 3,048	90 15 16 95 30	64 - 6 - 22-1/2 50 18	84 15 17 71 29-1/2	168 21 19-1/2 121 47-1/2	2,000 1,952 1,764 1,751 1,715	166, 204 2, 120 9, 640 99, 133 21, 386	11 12 13 14 15
4,456 3,266 3,732 3,566 3,400	5,500 4,320 4,200 4,600	12 1 8 4	2,400 1,700 2,124 2,500 1,800	3,145 2,000 3,780 3,276 3,600	5-1/2 21 9 225	40-1/2 2-1/3 20 7-1/4 91	12-1/4 6-1/2 18-3/4 8-1/2 220	60-3/4 8-7/10 38-3/4 16-1/4 312	1,504 1,645 1,832 1,850 1,757	44,104 6,830 45,525 11,179	16. 17 18 19 20

College and University Library Salary

			Chie	Associate or Assistant Department Heads Binimum Maximum Number Minimum Maximum Number					Mead Librariana School, College and Departmental (Professional) or Minimum Maximum Number		
	Labrery	\$abrerion	Minimum	Maximum	Number	Minimum	Maximum	Number	Minimum	MARSHOUTH D	MAN DO L
71	Cornell	5	\$5,491	\$9,514	819	\$3,948	\$5,500	16	\$3,720	\$5,500	14
22	Dartmouth				1	2,550	5,700	1416		++-*	5
23	. Delaware	6,290				4,000	4,600	5	4,569	1.4.4	1
24	Denver	4.000				4,548	4,600 5,100	5			
25	Detroit					4,000	3, 100				
26	Donke							4		4	1
27	Dessel	7.300		5,100	1	3,600	6,500	3.	3,400	3,900	1
28	Disks		7,000			5, 200	6, 150	5	3,600	5,600	7-1/6
29	Florida State	9,300	5,790	7,200	3	4,600	5,800	6	- 1 - 7	3,800	1
24	Finding State		35.100								
21	Fordham	7,000	4,500	5,900	5	4,200	4, 375	6-1/2	4,600	4,500	2
3.2	Georgie	8,790	6,200		1	4,600	5,300	5	4.000	4,000	i
- 11	Georgia Inst. of Tech	8,800	6,400		1			5	3,260	11,000	1.6
15	Harvard	9,420	5,400	4.400	1	3,825	4,575	.3	9,700	7,086.10	1
						4 120	5,490	9	3, 185**	6,000	4
16		8,700	1114	8,018	1	4,170 5,954	6,554	1	2, 103		
37		15,500	7,600	10,800	3	6,500	7,500	5	4,400	8,500	29
39	Illinois				1	6.200	6,500	6	3,600	7,200	5-5/4
40	Iowa	11,700	B, 600	* * *	1	4,000	5,800	5	4,000	5,000	5-3/4
	. lows State		7,500		1	5,500		5		2.24	
67.	. Johns Hopkins			*	2	4 4 4		1			4
4.1	. Joint University					2,520	4, 200	12	2,880 4,100	6,600	4
44	. Elengar	7,620	5,800	7,100	2	4,300 5,160	5,000	4	4,100	6,600	
45	Kansas State		2,000								
66	. Kantucky			1114		4,116	4,680	7	2,092	5,292	4 .
47	Lehigh			8,508		5,000	6,450	13	4,000	5.052	11
4.8	Louisiano State	10,008	4,800	8,508	3	4,620		3	1.200	4,900	5
50	Louisville	6,900	4,000			3,300	4,600	3	*	*	1.
						4 4 10		4	1,927	6,800	3
91	Maryland*	7,500	3,960		- 1	3,966	4,813	1	1, 727	0.000	-
9.6	Massachusotto		2, 100	17.4		2, 700					
54	Miami (Flurida)	11,000				4,100	5,500	5	3,600	7,000	3
	Michigan		10,600	11,400	2	6,100	7,400	7	4,200	12,500	10
0.0	Marking Serve		6, 100	8,500	2	4,200	5,400	7		6,620	1
67	Michigan State		8,000	0,900	2	6,180	6,672	4	3,460	9,300	22
5.8	Mississippies				1.0	3,600	4,300	6			17
5.9	Mississippi State Missouri [®]	6,600			9.0	3,850 4,700	4,300	5 3	3,400	5,700	5
6.0	Missouri*	8,500		3.4.4		4, 100	2,000		2,400	.,	
61	Montanta w	7,000	6,200		1	4,500	5,800	3			411
6.2	Montana State	6,200	5, 200		1	4,550	4,700 5,500	4	5,400	6,500	3
6.5	Netrocks	9,200 8,250	5,900	6,500	5	5,000 4,350	4,660	4	4,500	0.000	ï
6.5	New Hampshire	6,500	5,700		a	5,400	5,500	3	3,600		1
6.7											
6.6					1	6,500	5,775	5	5,000	9,250	7
67	New York University		5,238	7,866	2	3,474	9,935	11	3,100	6,000	8-1/2
69	North Carolina State	7,920		+ + +		3.450	4,984	6	3,816		1
19	Northwestern	10,500	6,700		1	4,000	5,750	10	1,600	10,500	7
-	W					4,300		- 6	1, 100	24.2	5
72.	Notre Dame	9,500 "	1 4 4				4,200	3			33
73.	Ohio State	11,004	7, 236	7,704	2	6,194	6,636	5	3, 636	6,310	14
74.	Chiahoma		6,400		8	4,000	6,000	10	4,000	4,500	Z
75.	Oregon		100		1.5						
76.	Oregon State	10,400 =		223	1 - 1	5,000	6,000	7	1,444	6,300	16
77.	Pennaylvania		6,200	7,000	3	4,680	5,400	5	3,960	5,676	6
78.	Pennsylvania State	8,640	6,768		2	1,800	5,000	5	3,180		9
	Pattalurgh		*		1	6,000	7,000	4	3,420	4,860	12
						0.000	6 600		4,400	6,600	7
81.	Pardut	12,500	4,740	7,400	3 8	5,000	5, 600	6	4,400	0,000	
82.	Rhode Island	8,000	5,000		i	4,500	4, 600	9			
84	Buchester	9,500			4.4	5,400	5,400	6	8,300	5,280	3
85	Rutgers	10,060	6,530	7,854	8	5,478	6,798	10	4,622	9,570	
pe	Saint Louis	7,200	6,000		*	3,600	4,800		3,660	5,400	*
87	Saint Louis	5,500			* *	4,200	4,600	2	4,600	4,600	2
88	Southern Illinois	10,000	7,200	7,920	9	5,040	6,480	7	4,050	4,0501	1
82.	Buythern Methodist	1,000	4 100	* * *	1	3,960	4,350	5 6	5,200 3,300	3,900	10
90	Syracuse,	8,500	4,680			2, 100	41 200	-	-,		
91.	Temple	7,000				4,280	4,920	8	4,360	4,860	5
9.0	Tennessee	9,400	6,500			4,700	5,200	4	3,400	5,088	7-2/3
93.	Tenne A. & M	8,000	6,200	7,000	2	4,300	5,340 4,600	4	4,000	5,020	2
94.	Tuiss	6,120	5,070			2,760	4,680	6	5,200		2
42,											
96.	Utah	8,600	6,700	0.100	1	3,000	4,900	2	4,700	4,800 5,100	1
98.	Varmont	7,000	4,900	5,100	2	5,160	0,432	6	4,126	6,432	3
99	Virginia	9,000				5,100	5,220	- 6	3, 100	6,000	12
100				* * *	- *	5,220	6,600	4	3, 900	5,640	15

Statistics, 1954-55 Group 1 - Continued

All Oth	er Professi	nnel	All N	onprofession		Full-T	er of Emplo ime Equival Nanpro-	yeas in ent Total	Working Bours in Fiscal Year	Hours of Student Assistance	
\$5,336 3,300 3,900	\$7,500 4,500 3,900 3,900	52 10 2 9	\$2,304 1,710 2,100 1,920	\$3,720 3,600 3,000 3,000	90 57'0 12 17	87 25 8 16	84-1/3 3900 12 17	171-1/3 64 20 33	1,833 1,650 1,700	82,956 11,629 7,000° 14,458 16,734	21 22 23 24 29
3, 415 3, 900 4 3, 100 3, 000 3, 600	3,700 4,000 4,950	2 3 28 31	1,920 1,800 1,800 1,800 2,160	2, 790 2, 460 2, 400 3, 200 3, 600 3, 200	7 6 40 57 24	8 0-1/3 38-1/3 45-1/4	7 6-1/2 42-2/3 57 24	20-5/8 15 14-5/6 81 102-1/4 59	1,490 1,986 1,506 1,804 1,809-1/2 1,788	18, 406 1, 038 30, 455 78, 678	26 27 28 29 38
3,400 3,120 3,600 3,690 3,000 2,875	4,650 4,050 4,200 6,320 10,000 4,200	24 14 14-1/2 13 103-2/5	2,236 2,000 2,400 1,320 2,040	2,060 2,670 3,400 5,400 3,155	18 26-1/2 15 246-3/10 16	19 25 21-3/4	20 26-1/2 16 246-3/10 16	39 51-1/2 37-3/4 375-7/10 33	1,652 1,700 1,899 1,600 1,848	14,842 17,943 12,808 68,000 16,168	31 32 33 34 36
3,225 4,000 3,900 3,600 3,200	4,305 5,500 7,200 5,500 5,000	4 12 97-1/2 21 19	1,920 2,750 1,920 2,400 2,160	3,600 3,915 4,800 3,831 3,660	18 9 117-3/4 53 47-1/4	15-1/8 17-3/10 131 41 30-3/4	16-3/4 12-1/5 113-3/4 53 48-1/4	32-1/4 29-1/2 244-3/4 94 79	1,752 1,491-3/4 1,800 1,750° 1,840	13,651 29,129 105,920 48,576	16 17 18 19 40
3,849 1,800 3,400 3,600	4,500 3,500 6,200 4,740	12-1/2 - #- 9 29 12	1,920 1,590 1,732 1,716	3, 360 2, 700 5, 000 2, 520	27 38 15 36 6	19-1/2 16 26 60-1/4 18	27 28 14-1/2 31-1/2 6	46-1/2 52 40-1/2 71-3/4 24	1,848 1,725 1,880 1,856 1,716	25,500 61,538 73,030 27,093	43 43 44 43
2,592 3,600 3,300 2,700	3,972 5,220 3,900 4,100	14 . 20 4	1,800 1,000 2,100 1,898	2,556 3,240 3,000 2,652	25 27 13	28 to 10 50 12-3/4	20 to 5+1/2 27 13 6	56 19-1/2 77 25-3/4 13	1,700* 1,920 1,780 1801-1/8	26,000° 8,913 41,427 11,174 10,900	46 47 48 49 50
3,572 3,500 4,000	4,550 4,200 6,600	20 12 85	2,774 2,640 1,920 2,520	3,225 3,840 3,000 4,860	20-1/2 2 40-1/2 68	26 2 26 20 133	19-1/2 13 33 39 62-1/2	45-1/2 15 59 59 195-1/2	1,739 1,800 1,610 2,820 1,840	30,094 6,104 16,291 25,410 85,197	51 53 53 54 59
3, 720 1, 480 2, 160 2, 700 3, 500	4,620 5,160 3,300 3,750 6,800	11 68 5 6	2,308 2,100 1,520 1,750 1,560	3,940 3,720 2,600 2,400 3,200	24 45 8 7 31	22 93 11 12 18	24 45 8 7 24	46 138 19 19	1,952 1,904 ⁶⁰ 1,809-1/2 1,913 3,839	73,500 102,394 21,360° 14,574 30,936	56 57 58 59 69
2,600 3,000 5,700 4,360 3,500	4,100 4,400 5,200 4,700	9-1/2 6 22 1	2,040 2,400 1,800 2,658 1,900	Z, ZZ5 Z, 700 4, 300 Z, 790 Z, 475	5 3 35 2 8	9-1/2 10-1/3 34 7	5 4 33 1+1/4	16-1/2 16-1/2 67 8-1/6 18	1.700 1.710 1.908 1.750 1.004	12, 132 7, 232 47, 999 6, 575 19, 431	6.8 6.8 6.9 6.4 0.5
4,000 3,600 2,700 1,500 3,360	4,700 6,000 4,820 3,960 5,750	5 31-7/10 10 3 26	2,310	2,035 3,600 4,200 3,038 3,360	10-1/2 04-1/10 31-1/2 15 52-1/2	12 40-2/3 52-1/2 11 45	0-1/2 93 31-1/2 15 51:1/2	20+1/2 133-2/3 04 26 96-1/2	1,787 1,750° 1,849-3/4 2,028 1,754	21,851 38,000° 57,320 10,701 57,600	66 67 68 69 70
1,600 1,050 1,636 3,300 3,250	4,830 3,700 5,844 4,500 4,350	16 12 42 16 16-1/2	1,740 1,920 2,220 1,800 1,992	2,000 2,900 6,300 3,120 3,540	22 10 92-1/2 24 27-1/2	26 16-1/2 65 20 28-1/2	22 10-1/2 09 21 27-1/4	46 27 154 51 35-3/4	1,740 1,800 1,808 2,080 1,880°	30, 384 5, 161 73, 316 44,600 19, 309	71 72 71 74 76
3, 200 3, 200 3, 300 3, 000 3, 120	5,000 5,500 4,360 4,200 4,500	17 30 20 13-1/2	2,075 1,820 1,868 1,500 1,680	3,700 3,500 3,144 3,200 3,400	19 99 36 39-1/2	24-2/5 57-3/4 34 28-1/2 29-1/3	16-1/3 98 36 39-1/3	40-11/15 155-3/4 70 68 119-1/3	1,546-1/2 1,864 1,765-1/2 1,885	25,196 29,068 71,331 15,511 14,000°	76. 77. 78. 79. 80
4,400 3,200 3,000 3,000 3,432	4,800 4,010 3,600 4,900 5,412	6 5 8 16-1/2	2,160 1,980 2,800 3,016 2,040	3, 840 2, 700 3, 000 2, 340 4, 300	42 4 6 20-1/3	23 7 14-1/2 26-1/2 37	33 4 5-1/2 28-1/3 46	56 11 20 55 83	1,628 1,758 1,768 1,617 1,790	46,150 5,300 22,360 23,087 22,289	81 82 83 84 86
2,800 3,000 5,040 3,180 3,000	1,600 5,400 7,680 4,000 3,900	3 8 12 18	2,160 2,250 2,040 2,000 1,200	2,700 2,400 1,360 2,700 2,700	3 25 14 29	20 8 13 21 35-1/4	35 5-1/2 15 14 28-1/2	55 12-1/8 28 15 63-3/4	1,006 1,747-1/2 1,042 1,712	2,060 6,141 21,920 20,829 27,862	86 87 86 89 98
3, 760 3, 400 3, 168 3, 220 1, 200 ⁹⁸	4,060 5,000 4,212 4,000 4,000	10 17 19-2/3 10 2	1,800 1,800 2,280 2,040 1,500	3,600 3,800 3,324 2,790	25 38 47-3/8 25	32 24 46-1/3 18 9-1/2	25 39 39-3/4 25	67 63 85-1/12 43 19	1,595 1,760 1,872 1,896 1,755	22, 425 16,555 110,510 13,205 16,279	91 92 91 94 93
3, 200 3, 200 3, 456 3, 540 3, 309	4,300 3,800 5,160 4,500 5,640	10 6 18-1/2 13 30	2,400 1,680 2,112 2,040 2,220	2,700 3,500 3,936 2,880 4,500	5 9 41 27 70	20 12 28-1/2 25-3/4 48	25 9 41 28-1/2 70	45 21 69-1/2 54-1/4 118 ⁰⁰	1,060 1,732-1/2 1,720 1,032 ^{ss}	60,470 0,988 21,489 74,870	96 97 98 99 100

College and University Library Salary

	Labrary	Esbracion	Chi	esociate or Assistant of Libraria Maximum			rtment Her Maximum		Sch and (Pr	d Librarian pol, Colley Department rofessional Maximum	ge tal
102. 103. 104.	Washington State Wayne Woot Virginia Western Reserve Wisconsin®	7,000	9,000 7,530 5,260 8,660	8,910	1 1 1 2	6,060 6,413 1,620 3,402 5,000	6,750 7,423 4,650 6,924	4 7 5 6 8	7, 273 3, 000 3, 720	7, 200	1 × 5
104.	Wyoming "	9,660	:::*	1114	· j	4,500	5,208	3 7	:::•	:::*	9
	High Median Low N **	15,500 8,800 5,400 74	10,600 6,200 3,960 53	11,400 7,854 4,200 26	65	6,500 4,300 2,520 94	10,092 5,400 4,200 85	44 5 1 100	7, 273 3, 720 2, 880 67	12,500 5,676 3,720 59	30 5 1 76

1. Central library and all agencies. 2. Excludes student assistants and building maintenance staff. 3. Excludes vacations and legal buildays. 6. Not reported or not available. 5. Included in department heads. 6. Approximate. 7. Excludes Medicine, Pharmacy and Nursing Schools. 8. Excludes additional salary as Vice-Chancelline, 9. Excludes Denison M. D. Memorial Library. 16. For 9 months only. 11. Excludes Barnard College, Teachers College, New York School of Social Work, and College of Pharmacy. 12. Included in sneprofessional employees. 12. Included an anistant librarians of New York State Contract Colleges at Cornell. 14. Includes 4 comprefessionals. 15. Excludes bandery etaff of 9 persons. 16. Part of colary for library school. 19. Excludes General Extension Division Library, 18. Curator of Oriental Collection holds cacademic rask of Associate Professor and salary is of that rank. 19. 10-1/2 months contract. 28. Experiment Station and University School library staffs.

College and University Library

			ngullment			Book count			
	Fincal Year Ending	Total Under-	Total	Book Stock	Volumes Added	Physical or Biblio- graphical	Includes Documents		Pariodi-
Library	anding	E. variate	Graduate	BIOCE	Medee	Biaboreas	Doc distance.	behave	
I. Adelphi (N. V.)	90 Jo55	2.517"	592	75,010	5,256	Phys.	Yes	10	686
Z. Akron (Ohio)	BIDe54	4, 181 10	6.0	98,961	4,205	Phys.	Year	8.0	617
3. American (D. C.)	10Je55	3, 561	2,501	164, 666	2.038		No	9	648
4. Amberst*(Mass.)	10 Je55	1,065	1.1	298, 761	6,805	Phys.	Yes	1.2	970
5. Antioch (Ohio)	30 Je55	960		83,150	2,020	Phys.	Yes	9	544
6. Associated Coll., Claremont (Calif.)	10.2u55	1.616	206	240,000	10,000	Bibl	No	34	1,367
7. Baloit (Wis.)	10.Je55	893	7	166,558	1.607*	Bibl.	No	1.31	510
8. Bowdoin (Maine)	30 Je55	781		238, 259	4,040	Phys.	Yes	11	500
W. Bradley (III.)	30 Je55	2,892	35	95, 371	4,314	Phys.	760	12	1,002
10. Bryn Mawr (Pa.)	30Je55	628	133		4,823	Phys.	Yes	12	852
11. Bucknell (Pa.1.	10 Je55	1,905	25	144,225	5,557	Phys.	Yea to	11	1,075
12. Butler (Ind.)	31Ag55	2,854	677	170, 306	6,274			10	1,011
13. Carleton (Minn.).	10Je55	870		152, 206	3,463	Phys.	No	2.3	511
14. Central State (Ohio)	30Ap55	920		31,500	3,427	Bibl	Yes	21	362
15. Clemeon (5.C.)	30Je55	2,690	64	147,613	5,439			42	1,592
16. Colby (Maine)	303e55	1,050		191,500	3,862	Phys.	Yes	5	651
17. Colgate (N. V.)	30 3055	1, 116	29	216, 109	6.476	Phys.	Yee	17	011
In Colorado	10 Ja 55	996	17	160,526	2,506	Phys.	No	19	6.30
19. Connecticut	30Je55	8.19	1	157, 309	5, 196			6	760
10. Cooper Union (N. Y.)	10.Je55	1,340		112,000	1,797	Babi.	Teo	3.5	5.09
21. Denison (Ohio)	31 Ju55**	1, 109		107, 264	3, 321	Phys.	You's	17	547
21. Depase (Ind.).	103055	1,744	21	128,570	4,080	Phys	You	17	532
23. Dickingon (Pa.).	103055	833		100, 323	2,705	Bibl.	No	8.3	424
J4. Duqueena's(Pe. 1	3134a55	3,456	423	64,840"	3,576**		Yes	10	786
A5. Fisk (Tenn.)	30Je55	728	69	124,744	5,273	Phys.	No	3.5	497
26. Franklin & Marchall (Pa.)	30Ju55	995	6.2	136,000	4,000		Yes	9	611
27. Goucher (Md.)	10Je55	600	14	97,275	1,786	Bibl.	Yes	-6	458
28. Hamilton (N. V.)	30 Je55	579		234, 435	4,350		No	6	554
29. Hoverford (Pa.)	31Ag55	463	1.1	200, 190	3,619	Bibl.	Yee	9	700
10, Holy Cross (Mass.)	31 My 55	1,037	1	160, 275	4,819			28	350
31. Howard (Als.)	31Ag55	1,319		66,951	2,225	Phys.	Yes	2.2	642
IZ. Howard (D.C.)	30 Ja55	2, 176	107	300, 265	10,118	Phys.	Yes	39	1,664
18. Idahu State	10 Je 55	L. 790		90,427	5,054		No	97	849
14. Kent State (Chin)	10.7455	4,967	311	136,270	9, 196	Phys.	No	10	710
35. Knax (III.)	30Je55	822		83,544	3,611		Yes	10	325
16. Loyola (Calif.)	31Ju55	1, 351	2.2	82,482	3, 929	Phys.	Yes	2.2	371
37. McNesse State (La.)	103e55	1,450	2.5.5.	20,620	4,260	Bibl.	No	23	368
38. Maraball (W. Vo.)	30 Je55	2,613	313	99,409	3,285		2.7	7	4.04
19. Marygrove (Mich.)	10 Je55	677		71,499	3,220	Phys.	Yes	17	465
40. Michigan College of Mining & Tech.	30Je55	1, 772	19	68, 254	2,075	Phys.	Yes	26	537

Statistics, 1954-55 Group 1 - Continued

All O	ther Profess	ional Journhoe	All !	Nonprofession Assistante Masumum	Number		ier of Emplo ime Equival Nonpro- fessional		Washing Hours in Fincal Year	Hours of Student Assistance	
1,600 4,530 2,800 3,400 3,432	5,895 6,651 5,000 5,526	14 21 14 12 60	2,520 3,244 1,870 2,400 8,15£	1,960 1,483 1,400	11 41 32 27 29	20 28-1/10 ^m 20 23 81	15 41 32-3/4 27 25	50 69-1/8 52-3/4 50 106	1,952 1,984 1,778* 1,732 1,872	13,198 67,525 31,627 26,000 108,722	101 102 103 104 105
1,49Z 5,240	4, ZGO 4, 680	4	1,184	Z, 880 1, 480	119	10	6 128-3/10	253-3/10	1,640 1,695	2,706	106
5,040 3,336 1,800	10,000 4,500 3,300 94	101-2/5 13-1/2 1 100	3,244 2,000 1,200 101	6,516 3,240 2,000 99	246-3/19 29 1 102	23 2-1/7 107	246-1/10 25 1/2 187	175-7/10 51 #-1/4 107	2,000 1,800 1,400 103	175,341 23,087 1,638 103	High Median Low N

and manuscript collector included but not in ealary statistics. 21 Escludes Maryland State College. 22 10 receive less than minimum for verious ressums. 28 1, 632 hours for 12 librarians with academic approximated 1, 680 hours for those on staff 5 minimum for verious ressums. 28 1, 632 hours for those on staff 5 minimum for verious ressums. 29 1, 632 hours for these on staff 5 minimum for verious ressums for verious resource. 28 for loader School of Mines and Metallings. 29 1/4 from academic budget for teaching pervices. 28 for 10 months ervice. 29 1/4 from academic budget for teaching pervices. 28 for 10 months ervice. 29 1/4 from academic budget for teaching between the minest averages approximately 40 hours pre week. 21 Fig. 10 months. 20 Minestella for the first form 1, 635 to 1, 904 separation length of service. 28 Landades Law and two autonomous units. 20 Escludes Medical Librarian. 26 Escludes Wisconsin Historical Society Library. 37 Escludes Law Library. 28 Number of libraries on which high, median and low are based.

Statistics, 1954-55 Group II

Signs	iles, i	,54-	33	abrary D	perating E	ependitu	755					Ratio of Library Ex-	
Including Non- Periodical Serials	Staff Salaries	Student Service	Non-	Total Staff Salaries and Student Service	and	Binding	how	Other	Total Operating Expendi- tures	Fer Student Operating Expendi- tures	Total Insti- tutional Expendi- tures	penditures to Total Insti- tutional Ex- penditures (Per Cent)	
				\$42,876	\$16,801	\$1,200	\$20,000	\$2,218	\$ 65,095	\$20.56	\$2, 517, 427		1
No	\$35,284	9, 297		45, 26.0		2,693	20,541	2,998	68,807	16.19	1,550,565		2
360	35, 971	0.004		14, 152		1,871	12,798	1,398	68, 168	8.10	1, 810, 219		3
	28, 198	6,829		54,942	29,051		12,762	4,715	90, 437	84.05	2, 144, 652		4
No.	26,766	12,143		18, 909	11,994		13,142	1,999	54,050	55.15	1,144,995	4.79	5
No	T8.000	14,500		92,500	21,000	7,000	10,000	8,200	110,700	71.75	2,593,524		4
	24,600	2,800		29,400	9,500	1,200	10,700	1,500	41,600	46.22	771,883		
No	26,459	1,951		10, 190	14,690	3, 165	18,055	2.452	50,897	65.00	1, 114, 415		7
760	21,600	6,900		29,600	15,440	3,000	18,440	2,500	50, 540	17.00	1, 369, 195	1.70	
No	45,697	1,151		49,750	21,920	2,950	24,878	2,566	76, 194	100.10			10
No	11.637	11,857		41.494	19, 100	2,410	21,710	2,004	69,238	35.91	1,558,738		11
No	36, 506	9, 195		45,901	14,695		16, 360	1.677	64,418	19.16	1,859,132		17
Yes	25, 100	96.8		24,068	11,447		12,425	1,259	17,752	44.27	1, 133, 144		14
Yee	23,040	2,879		25,919	7,747	77	7,824	1,581	11, 126	38, 39	1,065,627		0.0
Pass	91,595	12,067		63,642	26, 366	8,186	34, 552	11,961	112, 199	41 00	Z, 186, 100		10
No	25,641	3,297		28,916	15, 331	1,950	17,201	4,530	50,749	46.16			16
760	27,000	13, 335		40, 315	12, 289	1,251	13,540	6,714	58,609	41.09	144	2.55	10
No	21,520	2,910		24,430	7, 241	1.813	9,056	1,796	35,282	35.55	589,839	3.10	19
No	46,819	4,607		51,426	17, 300		20, 151	2,334	73,911	88,09	1,149,682		20
Yes	49,760	9 000		59,760	11,742	1,900	15,642	3,895	70, 297	58.00	1,528,000	5.12	
No	29,997	5,580		35,577	12,771	1,749	14,520	2,676	52,773	40,62	1,165,185		21
No	16, 968	2,951		39,919	14, 107	1,059	16, 166	2,436	50,521	31.62	1,670,153		23
710	21,900	6,278		28,178	9,486	6.36	10, 122		18, 100	45.97	760,947		2.6
760	11,006	5,433		36,414	19,544	1,325	20.069	2,244	59,551	15.35	1, 137, 247		25
760	16,149	1,891		40,040	14,679	5,491	10,170	2, 357	60,567	75.07	815,462	1.25	
No	22,400	5,800		28,200	10,000		11,800	1,500	41,500	39.26	950,400		26
	25,811	1,966		27, 797	7,517		11,276	1,459	40,530	66.00	737,869		Zū
No	20,416	9,215		29,654	14,412	05	14,497	9,079	51,230	91,00	1,049,105		29
No	32,744	1,760		36,504	17,660		19,007	12,000	67,551	143,10	951, 171		89
	19, 982	8,010	\$ 7,000	35,000	10, 131	1,500	11,631	21,410	68,061	34, 10	271.171		
No	19,071	7,119		26, 207	7, 216		7,986	1,975	16,168	27.42	6,23,318		12
160	96.191	11.161		101, 152	31,859	3, 5,35	35, 194	9,631	152, 377	45.12			13
No	16,980	14,120		51,100	16,050	2,500	18,550	4,150	73,808	24.91	1,392,316		10
540	71,882	10,110		61,912		5,666	36, 574	8,000	130,506	37.90	818,678		39
No	18,953	2,572		21,525	10,185	1,326	12, 111	5,529	39,165	31.90			
No.	19, 176	7,814	6,000	28,210	31,149		35,873	3,595	67,678	47.86	876,876 1,020,000		36
Nu	21,175	1,800		24, 975	24, 229		27, 329	6,412	58,716	16.00	1,437,780		10
	25, 544	5,741		31,285	11,562	1,975	13,537	1,514	46,336	60.11	1, 437, 700	6.00	19
No	6, 100	2,462	18,500		10,780		12, 701	734	44,890	25.06	1,914,569		45
Yes	27, 166	2,618		29, 984	11,731	2,507	14,238	668	44, 870		1, 134, 101	2.00	

College and University Library Statistics,

		Fieral	Student K	invollment			Book count: Physical or			
	Library	Tear Reding	Under-	Total Graduate	Book Stock	Valumes Added	Biblio- graphical	Includes Documents		Periodi- cate
61. B	Addiobusy (Vt.)	163-55	2,244	14	125,213	0.60 , 5	Phys.	No	1.6	457
	tills (Calif.)	30 Je 55	488	79	119,729	2,109	Bibl.	No	3	620
	fount Holyoke (Mass.).	10 Je55	1.127	45	243,841	5,306	Phys.	Yes	13	725
	Sublemberg (Pa.)	11Ax55	729		89,501	2,800	Phys	Yes	1.1	416
	Mexico College of A. &M. Arts .	101499	1,848	185	89,033	3,548	Phys.	No	26	891
46. 31	orth Texas State	31Ag55	4,551	399	272,690	14,812	Fhys.	Yes	3.3	1,609
	breidental (Calif.)	90.1e55	1.207	0.6	117,396	4,150	Phys.		17	698
	Min University, Athens	10 Je55	5,230	1.05	243,877	11,554	Bylot.	Yes	13	1.081
	ortland (Ore-1	10 Je55	970	47	61,670	2,974	Phys.	No	1.2	306
50. 12	uneus (W. Y. J	19Je55	3,730	401	100, 323	8,500	Bibl.	No	5	676
51. 2	edlands (Calif.)	30 Je55	945	58	94,584	1,715	Phys.	Yes	7	TIB
	zed (Ore.)	30Je55	653	15	104,591	4,700	Phys.	Some	5	445
53. B	olling (Fig.)	10 Je55	714		90,276	3,398		No	12	160
54 (1)	screvelt (III.).	31Ag55	2,822	224	106,070	10,460	Phys.	Yes	25	63E 429
55. E	weary (til.)	10 Je55	625	67	72,013	2, 151	Phys.	No	15	453
16. 5	t. Catherine (Minn.)	30.2e55	948	2	81,146	2,543	Bibl.	No	17	483
	t, Thomas (Minn.)	30 Je55	1,198	18	53,788	2,037		No	3.3	611
	an Francisco (Calif.)	30 Je55	2,311	204	55,286	3,823				675
	osto Class (Calif.)	10.1e55	1,270		81,576	6,166	Bibl	No	1	5.60
	kidmore (N.Y.1	10 Je55	1,056		76, 300	2,734	Phys.	You	7	522
61. 50	mith (Mase.)	30 Je55	2, 208	82	400,933	0,535	Phys.	Yes	29	1, 117
	o. Dakota State	303e55	1.976	68	108,679	2,269	Bulid	Some	24	1,021
	teteon (Fig.)	HAg55	1.285	8.6	66,2974		Bubl	No	T Dea	53414
64. 5	warthmore (Pa.)	39Je55	920	5	194,948	5,691	Frey a.	Some	1.0	1,016
	exas Christian	31Ag55	3.772	275	256,405	18,732	Phys.	Yes	18	881
66. 7	aleda (Ohiot	30 Je55	5.167	203	189,588	11,323	Phys.	Vee **	- 6	767
	einity (Conn.)	10Je55	906	298	354,801	4,711	3°hys.	No	1.6	538
	alperaise (Ind.)	10 John	1,885		78,461	3,536	Phys.	No	14	947
	assar (N. V.)	39Je55	1.413	10	303,600	8,282	Phys.	Some	27	3,376
70. V	organia Puly, Institute	10 Je 55	3, 143	204	194,019	21,720		Yes	91	1,802
71. W	Fellenley (Mass.)	30Ja55	1.716	18	298, 777	5,814	Phys.	26.0	21	1,159
	Seeleyan Univ. (Conn.)	30 Je55	754	6.7	407, 165	9,868			1.1	975
	fichita (Kan.)	30Je55	3,528	320	118,095	7,911	Think.	Yests	7	816
	illiam & Mary (Va.)	10 Je 55	1.761	2.2	245,471	8,168	Phys	No	1.0	1, 332
	lilliams (Mass.)	30Je55	1,064	8	223,976	5,367	Phys.	No	9.	775
76. W	Ittenberg (Ohio)	10Je55	1.023	95	99.017	2,027	Phys.	No	12	598
	unster (Ohio)	10Ag55	1,033	4	127, 997	3,479		Yes	9	418
	High		5,238	2,501	407, 165	21,720			91	1,802.0
	Median		1,285	67	110,912	4,080			13	623.5
	Low		109	1	20,620	1,687			1	306.0
	76 07		77	5.0	76	77			76	76

^{*} Founder are at the end of the following table.

College and University Library

	Lebeasy	Chief Librarian	Associate or Assistant Chief Librarian Minimum Maximum Number			Department Heads Minimum Maximum Number			Head Librarian Schnol, College and Departmental (Professional) Minimum Maumum Number		
2.	Adelphi (N. Y.) Abron (Ohio) American (O. C.) Amherst*(Mass.) Antisch (Ohio)	9,500	\$	\$	1	\$ 4,500 3,600	5,500	1	4,200		
	Accounted Cullinger, Claremost (Calil.) Beloit (Wis.) . Bowdon (Me.) . Bradley (III.)	6,800 5,800 7,700	4,000 5,200	5,000	3	3,900	4,000	· 2,			
13.	Bucknell (Pa.) Butler (Ind.) Carleton (Minn.) Central State (Ohio) Clemaon (S.C.)	6,200 6,000 6,000 6,500	3, 240 4, 85.0		2	1,650 2,500 2,700 3,600	4, 300 1, 024 1, 600 4, 435	5 4			
17. 10. 19.	Culby (Maine) Colgate (N. Y.) Culoredo Connecticut Conper Union (N. Y.)	4,500	4,000 4,300 5,000	4, 100	8 8	5,500 3,600 3,600 3,000	4, 109 3, 609 4, 809	3 3			

1954-55 Group II - Continued

Serie			Non- solaried Service	and Student	Books and Related Materials	Binding	and	Other Operating Expendi- tures	Operating Expendi-	Per Student Operating Expendi- tures	Total Insti- tutional Expendi- tures	Total Inst tutional E penditure dPer Cen	11 - 10 - 16
750				1111						24.35		r 2,20	
No	23,497			24,997	9.466	9.67	10,453	721	36, 171	64.24	670,686		
No	52,267			54, 317	21,204		23, 496	3,407	81,220	49.00	1,557,965		
2911	23,405			25,242	8,010	739	8,749	1,809	35,800 65,812	32, 32	2, 887, 398		
260	30,737	8, 211		18,956	23,061	1.929	24,990	2, 111.0					
200	62,292	16, 374	PF	78,576#	47,076		56,247	10,856	145,679	42.00	2,329,230		
No	34, 620			19,544	11,574		37, 577	6,196	116,097	21.77	3,461,707		
Yes				72, 324	32,712	4,000	4, 839	0,170			491, 909		49
No.	19,700	17,042		98,912	11,600		14,100	3,220	116,240	27.54	2,700,000	6, 20	50
2410							17 000	4 170	57,504	51.91	1, 128, 489	5.22	51
740	29, 229			40,179	11,096		12,986	2,914	42,491	62, 11	617, 298		52
No	21, 396			25,034	4,062	417	5, 279	1,689	35, 224	49.11	694,000		5.3
No	28,031 76,492		pan	70, 292	19, 260		21, 323	11,006	110,623	36,31	1,186,331		54
No téo	10,400		15,250	14,760		1,657	10,549	7,010	36, 519	52.96	501,410	7, 25	55
		6.000	13,901	22,521	14, 105	1,742	16,047	548	39, 116	4,56	659, 392		54
No.	1,588			24,196	8,249	961	9, 210	2,596	35,912	29.06	858, 153		57
Ne	19,761			30, 351	13,723	958	14,681	1,881	46,913	18.65	1,014,958	6.62	58
No	24,555	2.408	7,000	15,967	23,709		27,935	5,143	67,045	42.63	1,090,525		6.0
No	33, 362			33, 162	9,005	1,295	10,250	1,415	45,925	44107			
No	88, 425	4,937		93, 366	55, 138	3,814	34,992	9,215	139,531	60.93	3, 219, 408	4.38	61
No	25,970			33, 442		1.759	10,930	1,965	46, 345	22,90 50,42	1,077,629	6.00	63
No	35, 246			46,791	17,779		19, 165	3,177	00, 721	95.43	1,330,200	6.64	64
No	55,440			61,678	20,484		36,214	1,682	95, 242		1,677,000		65
No	46,626	8,720		55, 346	10,000	3,320	30,210						6.6
No	51,421			58, 484	20,788		24, 310	1,522	55,447	46.05	1,215,170	4.50	67
No	32,630			15, 129		1,188	17,636	2,682	40,150	20.50	1,005,600		6.0
No	21,200			27,400	11,950	5,871	15, 993	7,463	104.444	115.56	2, 579, 000	6.66	69
Yes	\$15,186 \$16,342			116, 342	17, 707		47,052	6,621	170,015	50.79			70
190	110, 344									76.00	2,291,797		71
No	92,567			93,655	29,886		14,959	3,032	131,646	128.00	2,962,656	0.60	72
Nu	56,931			66,847	30,281		10, 919	9,952	91,178	23.68	1,759,764	5.06	73
0.0	61,699			50,307		2, 393	31,745	7,417	109,760	61.55	1 401 619	7.80	7-0
No.	60,577 18,342			41,462	22,612		20.977	2,504	70,943	66,16			75
					10, 351	962	11, 111	933	37, 436	33.60	1,059,379		76
No.	24,190			25,190		1.112	10,847	1,390	40,864	40.00	975,250		77
,,,,					47,076	0.765	56, 247.0	21.430	170,015	141.10	5,004,000	9, 30	High
	116, 342			36,471	14,448		17,060.5	2.636	58,609	42.32	1,175,750	4,95	Modra
	31,005			18,960	4,862		4, 539.0	400	35,224	4,56	493,909	1.19	Low
	75				75	75	76	74	75	76	76	72	24

Salary Statistics, 1954-55 Group II

	ner Professi Labrarians Maximum			Congentessi Assistanta Maximum	onal	Pro-	Monaro-	Lent	Working Hours in Fiscal Year	Hours of Student Assistants	Total Audin- Visual Espend tures	
\$1,000 3,300	*	4	\$1,000 2,925 2,600	\$2,500 3,520 2,700	6 3 - 9 1	5 5 7 5	6 5 5 0,5	11 11 10 15 5	1,617 2,049 1,900 1,615 2,080	12,097 6,006 4,047 10,209	593 1,628 571 1,873	2 3 4 5
3,500 3,600 3,300 8	9,800 4,000	2 1 1	2,400 2,000 1,872 1,900	3,000 3,000 2,600 2,600	8 2 2	6.5 5 4.7 4 7.7	9 1 2.7 2.5 7	15.5 6 7.4 6.5 14.7	1,872 8,840 1,778 1,575* 8,625	17,544 5,600 8,659 5,000		6 7 8 9 16
3, 360 3, 500 3, 194	3,650	3 2 4	1,664 1,720* 2,900 2,111	3,400 2,500 2,600	6 7 2 5	7.5 3 3 6. 10	6 12.5 5.7 1	13.5 15.5 6.7 7	1,930 1,633-1,640 2,040 1,587 1,909	5,100 11,743 1,700 6,397 10,105	143	12 12 13 14 15
3,000	3,900	5	1,600 1,600 1,800 Z,280	2,200 2,000** 2,800	7 2 5	4.5 6 4 5 0.6	7 6 5 8,5	11.5 12 9 13.5 12.6	1,762 1,853 1,796 1,605 1,683	5,994 5,209 4,452 6,612 9,216	2,558 199 160 1,869	16 17 16 19 20

College and University Library Salary

	Labrery	Chief	Chi	esociate as Assistant of Labraria	80		setment Hai		Scl and Dep	ad Librari, mol, Colle artmental Maximum	(Prof.)	
	and any	David of Con	(Marian Carry		I. Garrioux	100,000,000,000	Man		COLUMN TO STATE OF THE PARTY OF			
2	Decisio (Osio)	5,600				4,100		1.				
2	I. De Pauw (list.)		110	117	ă.	8		.2				
- 2	I. Delaw (list.)	5,600				4,200	5,200	4				
- 27	1. Duqueane (Fa.)	5.000							4			
21	Fick (Tenn.)											
21	Franklin & Marchall (Pa.)	6,572	4,200		1	3,000	3,140	3				
- 21	Goucher (Md.)			3:5								
	Hamilton (N. Y.)				1	1,500		2				
23		1,865**	5,960	4,100	Z	5,006	1,600	4				
35	I. Holy Cross (Mass.)	7,000	4,200	5,500	Z	1,200	4,000	it				
31	. Howard (Ala. 1	5,100				3,600		1				
	Howard (D.C.)	7,500			- 5	4,481	5, 189	4	4,465	5,889	3	
11	bilaho fitate	6,000	4,500	4,500		1,990	1, 900	1	3,600	3,600	1	
0.6	Hent State (Ohio)	8,700	5,400	4, 700	1	1,600	4,900	5				
31	Knoz (III.)	6,000	. 1			3,200	4,450	2				
34	Larynia (Col.)	6,000										
5.7		6,600				4,10000	5,15000	3				
18	Marshall (W. Va.) Marygrave (Mich.)	5,270										
19	Marygrave (Mich.).	5,000%	4,000*		1	3,600		1.	3,000*		1	
0.0	Mich. Col. of Mining & Tecl	1,75,805	4,010	4,455	Z.							
	14.44.											
0.1	Middlebury (Vt.)				1		3, 050	1		1.5	2	
63		5,000			1	5,400	3,850	3 2				
64		6, 100	4,500		1	1,400		i				
61		10. 100	4, 200			7,400						
*	In making car in his or his											
86	Morth Tenas State	7,755	5,200		9	4,000	4,800	7	5,100	5,200	8	
4.7	Orridantal (Col.)	5,000				3,500	4,500	5				
68	Ohio Univ., Athens.	8,223				4,300	4,746	6.				
6.9	Portland (Ore.)	5,060	4,000		1	3,200	3,500	2				
5.9	Queene fit. Y. 1	7,650	7,010	7,770	1	4,160	6,650	2	3,550	5,500	5	
51		5,700				3,740	4,300	4				
52	Reed (Ore.)	5,000				1,500	4,000	3				
33	Rolline (Fla.). Roussveit (III.)	4,600				1,000		4			15	
10	Boosevelt till. 1	5,400	V 700			4,000	4,700	4	4,450		1	
22	Bossey (III. I	4,000	1,750		1							
46	St. Catherine (Minn 1	5,200				3, 100	4,000	3	3.600	5,000	3	
67		1,900	500		174				1	11/4		
58	San Francisco (Calif.)	6,000										
59.	Sente Clara (Calif.)	7,000							4,000			
60	Skidmore (N. Y.)	5,050	4,250	4,900	2							
61.					0	1,600	4,550	6				
62.	So. Dabota State	6,700				4,000	4, 200	6	3,800		1	
5.1.	Statem (Pla.)	5 100	4,000		0	1,700	4,400	3	4,000		1	
59.	Swarthmore (Fa.)							4	1 700		1	
45.	Tenes Christian	5, 400				1,900	4, 164		1,600		1	
66.	Totalo Ifficial				1)			1	
67.		= 3				200	11.0		1 - 1	3 - 1	i	
6.6	Valuaratan (Ind.)											
6.9	Valparaion (Ind.). Vaccar (N. V.)	6, 100				5, 100	5,800	4	4,050	4,400	2	
70	Virginia Poly. Institute	6,432	5,160	6.432	2	0.120	5,400	4				
71.		7,000	5,500	5,500	4				4, 200	4,200		
72.	Weeleyan Univ. (Conn.)	7,600										
73.	Wichite (Kan.)	6,000				3,600	4,400	4				
76	William & Mary (Va.)	7,032				4,320	5,400	5	3,667		12	
75.	Williams (Mass.)	8,250	5,600		1	4,500	4,800	Z				
24	Wittenberg (Chick											
77	Wittenberg (Ohio)	1 4 1		1		- 1-1		2,				
***	wanted frances							7.5				
		9,600	7,010	7,777	3	5,100	6,650.0		5,100	5,609	5	
		6,000	4, 100	5,000	1	1,600	4,417.5	3	4,000	5,000	1	
		1,865	500	4,100	1/4	2,500	5,024.0	1	1,000	3,600	1	
		54	25	11	3.5	46	1.6	53	19	7	16	

<sup>1,865 500 4,100 1/4 2,500 5,024.0 1 5,000 3,600 1

14 25 11 35 46 38 53 15 7 16</sup>L Including 709 evening students. Is. 1942 evening students. Z. Not reported or not available. 3. Dormitory libraries regularly excluded. 4. Discs not include 5,150 documents, pamphists, microcards, and recordings which were equived 5. If cataloged. 5s if bound. 6. Includes library equipment 6,546. Z. Nine months and summer echoel. 8. Director 1,800 hours. 9. Ten manths. 9a. Nine months glus 1/4 addition for summer work. 10. .75 and 1.00 per hour for 6 persons. 11. Discs not take into account entensive cervice to public. 12. Fiscal year salars acquist 1,1955. 13. \$1,578.5 for 10 manths employment. 4. School of Law Library not included. 15. Seventy-two microfilm. 14. Contributed salary. 14s. Contributed salary.

Statistics, 1954-55 Group II - Continued

All or	ner Profess	une1	AU N	onprofessi	onsi	Intal Numb	er of Empl me Equival Nonpro-	loyees in	Working Hours in Fiscal Year	Hours of Student	Total Audio- Visual Expend-	
Minimum	Maximum	Number	Minimum	Maximum	Number	iessional	fessional	Total	in Fiscal Year	Assistanta	Hares	
3, 100		4	1.680*	2,600	4		5.5	11.5	1.712**	5,377	1,80%	21
3, 100		2			4	6	4	10	1.772	5.462	250	22
				11.0	-6	4.5	4	8.5	1 1 1 1	10,000		24
3,000	4, Z00	5	1,650	3,000	9	6 7	5 7	1.6	6	7,450		29
						,	,	1.9				
			1,740	2,000	2	5	Z	7	1,648			26
						4	5	9	1,519	3, 234		27 28
3,300	11.5		1,800			3	2.5	2	1,715-1,862	4,200	160	29
3,012	3,600	2	2,780	3,060	3.	16.5	1	1.5	1,710	12,875		30
			3,000	3,500	-	7.5	,					
2,810		2	1,800	2,700	3	3.5	2.7	6.2	1,875	11,000	130	31
3,636	3,636	6	2,927	3, 382	1.5	14	13	27	1,856	15,927		33
3,600	1,840	2	1,440	1,620	4		2.7	19.5		19,480	1.066	34
3,200	4,400	5	2,100	2,400	10	11.5	8	7	1,771	4,268	14.2	35
			1,920	2,400	,		-					
1,240	4,200	2	2,520	1,000	3	2	3	5	1,680	4,632	150	36
1,240			2, 289		2	-6	4.	6.	2,000	0, 634	154	18
1,000	4,200	-8	1,800	1,950	3	4.5	2.5	7	1,560	4,102	1,952	39
1,000	3,500	2	3,000%	3,819	1	4		9	2,016	1,852		40
2,615		1	1,920	3,810	9	-						
			200	7-1-2	7	5	. 3	12	1,601	1,495		42
		100	3,120	33.4	1	5.5	1	0.5	1,560	1,042	131	41
513		5			8	4	8	17	1, 768	41.7.00	176	64
3,000		1,	1,800	2,400	4	6	3.5	9.9	1,794	4,996	433	45
			1,000		*	-						44
3,520	4,669	2	2.600	5,000	9	12.7	4	16 / 7	1,760	6,832	7, 665	46
3, 740			2,400	3,500	6	6	4.7	10.7	1,677	19,189		4.6
1,400	4,177	2	6.824	5,780	1.1	4	12	4.6	1,920	4,452		49
	5,500	10	2,615	4,500	3	18		24	1,500	12,000		5.0
3,550	5,100	10	2-01-							12,477"	400	51
			2,460	2,880	4	5	4	0.0	1,752	4,040	400	52
			2,400	3,000	4	4 6	1.6	11	1. 6.80	300	96	53
2,400			1,850 (at 1, 25 hr. 3, 020	10	- 14	7	25	1, 500	1,890 **	5, 145	54
1,500	3,750	2	2, 576	887	2	4	1.2	4.2		4,001	45	5.5
3,750	3, 730								1,800	1,020	329	56
			2,400		1	6.4	5/8	6.7	1,725	5,524	74.0	57
3,660	3, 700	2	2,100	2,412	4	2.7	2	7	2,688	6,413	50	56
3,480	1,900	9	2,800			6	5	9	Z, 0.12	2,400	947	59
3,760	3,939	2	448	2,650	8	5	4.2	9.2	1,518		247	6.0
35.144						42	14	10	1,010	(-3, 181)		63
2,400	3,859		1,840	2,650	16	16	14.7	6.7	2.044	9,963		112
3,900		1	1,980	2,400	6	5.6	4.6	10.3	1,400	18,084	518	63.
7.55	100	6	0,000			9.4	6 6	16	1,798	5,007		64
3,600		2	8,800	2,541	5	9	4.5	13.5	1,080			5.5
						9		14	1,840	9,501	1.68	66
	100		113	111		5	4.5	9.5	1.631	1,500		67
1111	133	- 3	100	11.11	3	4	2	6	1, 760	4,530	650	69
3, 300		5	2,184	3,700	21	12	19	31	1,700#	11,147	1,237	78
3,456	4,320	1.5	2,112	2,400	62	1.4	21.5	40.5	1,745			
			2 200	3, 120	13	14	11.7	25.7	1,505	755	1,410	71
3,600	4,400	8	2,280	2,800	10	10	10	.20	1,4.60	8,000		72
3,500	4,620	2	2,200	2,600	.7	7	. 6-	1.1	1,900	11,697	2,828	73
3, 456	3,600	3	2,304	3,168	11	7.5	4.5	10.5	1,912	4,160	724	75
2,700		2	2,100	2,500	5	6	4.3	10.0				
		1.			5	1	5.5	8.5	1,856	1.070	1,770	76
			111	111	1	5.5	1	A . 5	1,422	0.818		77
							25.75	40.50	2,688	39,557	7,045.00	High
3,900	9,500	11.0	3,120	4,100	22	19	4,75	10.00	1.765	5.759	555,50	Median
3,456	5,875	2.5	2,100	2.700 887	5.	1	.63	6 25	1,400	100	45,00	Low
2,400	1,000	48	59	47	6.81	77	77	77	70	6.6	16	76
4.5												

hours. 17. One-third time librarian. 18. One full-time professional one year only. 19. Includes Houghton and Salt Branch campuses. 20. Salaries of student assistants in the hombindery (6,886) are included in Binding. 21. 1953-54 only available figure. 22. 1087 hours in special project. 23. Motion picture operators only. 24. Following (gaves represent 11 months ending May 11, 25. 10c bades 1502 evening students. 25a. Evening School evaluated as if full-time basis. 26. Vacation allowance related to length of service. 27. Number of libraries on which high, median and low are based. 28. Excludes vacations and legal buildays. 27. Total bours not given, not included in median.

College and University Library

									Libra	ry
			Student E	nrollment						
		Fiscal.	Total							
	Popocah	Ending	Under- graduate	Total Graduate	Block Stock	Volumes Added	bebake.	Periods- cale	Staff	Student
1	Agnes Scott (Ga.).	10 Je 55	535		63, 275	2,427	7	26.6	\$12,330	\$1,321
2.	Alahama College	11.Ag55	507		66,004	1.579	1.7	428	15,300	2,200
3	Alleghony (Pa)	50 Se 55	973	6	134,113	1,984	11	594	12,931	2,741
5	Anderson (Ind.)	10 Je55 30 Je55	843	72	28,071	2,378	5	279	6,867	5,795
6.	Arkansas A & M	30 Je55	783 054		18,900	751	15	201	7,961	2,177
7	Arbaneae Polytechnic	10 Je55	1, 102		18, 900	2,142	6	423	16,180	1,600
9	Arkaness State Ashiand (Ohio')	31 My 55	429	4.5	28, 350	1,000	5	177	9, 150	224
10	Askiand (Ohio) Augustana (5. D.)	30 Je55	795		36,659	1,666	6	273	7,800	2.674
	Aurora (III.)	90 Je 99	5.99		39, 373	700	4 7	500	8,132 22,788	2,941
13.	Baldwin-Wallace (Ohio)	30 Je55	1,400		61,050	1, 926	10	310	13,912	1,933
16	Bates (Mo.)	10 Je 55	052		95,867	2.769		663	17,600	1,897
	Beaver (Fa.)	31My55	526		33,000	1.049		254	8,815	450
16	Bennett (N. C.) Bennington (Vt.) Betheny (Kan.)	30Je55	450 355	-	32,494	1,513	18	129	15,770	1,106
18	Betheny (Kan.)	31My55	291		31,000	566	7	105	9,216	959
0.7			473		54, 528	1,515	1.2	140	8,495	1,526
20.			812	59	80,041	1,735	11	186	12,835	3, 272
21.	Catawho (N.C.) Cedar Creat (Pa.)	10.Je55	506		44,719	2,470	4	100	6,233	814
22.	Charges (Calif.)	10 Je55 31 Ag55	377		27, 742	1,579	6	279	6.454	1,641
24	Cne (Inwa)	31.Ag35	751		61,652	652	8	261	11, 100	1,425
25	Chapmon (Calif.) Cne (Iowa) Coher (S.C.)	31 3155	216		20,578	459	11	187	4,291	876
26	College of the Ozarks (Arb.)	30 Je55	261	174	57,768 63,080	1,268	12	194	3,800 22,589	4,045
28	College of the Pacific (Calif.) Contord (W. Va.)	30Je55	1,056	225	24, 161	099	15	281	19.712	2,404
29.	Concurdes (Mann.)	10 Je55	1,255		44,803	1,627	1.2	270	9, 256	2.072
30	Davidson (N.C.)	30 Je 55	845		64,901	Z, 311	19	298	15, 275	3,140
31.	Drury (Ma.)	31My55	652		17, 401	1,645	9	503	9,783	1,270
32.	Eartham (Ind.) Elmirs (N.Y.)	10 Je 55	622		61,109	2, 396	6.	361	7,595	1,511
14	Remove and Henry (Va.)	31Ag55	297		11, 492	1,505	18	255	6,900	3, 257
35.	Evanaville (Ind.)	10 Je55	1.091	269	16, 823	2, 271	7	306	9,860	1,455
36.		SLAg55	3, 975		34,011	1.564	4	449	21,819	946
37.	Findiay (Ohio)	31 My55	285 470	14	42, 191	1,040	4	234	7,966	1,181
16.	Franklin (Ind.)	10 Je55	710		55, 272	1,834	8	225	8,705	2,146
40		10,5455	019		63, 595	3, 314	11	285	16,800	3,500
61	Golden Gate (Calif. /	10 Je 55	1.816	151	24, 409	4,416	3	171	9,055	925 Z, 284
61.	Custaves Adolphus (Minn.)	31My55 15Ag55	710		52,076 41,809	3, 056	7	100	4,955	1,996
44	Hactings (Nob.) Headrix (Ark.) Hillodais (Mich.)	11.7155	492		60,475	1,511	6	125		
65.	Hilladale (Mich. I	10 Je 55	5 30		14, 482	718	0	145	5,800	505
66	Hiram (Chio)	10 Just	400	1.4	75,000	1,500	15	415	11,529	726
67.	Holling (Va.)	30Je55	423		54, 65Z 22, 476	2,300	9	277	10,900	3,508
67	Hood (Md.)	31Ag35	794		53,686	1,461	7	286	14,400	1.636
50.	Houghton (N. V.)	30Ap55	501		35, 543	1, 104	7	278	0,090	2,555
51.	Huntingdon (Ala.).	31 My55 31 J155	640	12	44,763	1,610	14	143	7,256	1,752
53.	Huntington (Ind.)	30Je55	298		63,361	1.271		204	6,200	1,090
54.	Illinois College	31,3155	909	7	94, 205	1, 299	6	510	7,760	4,500
55.	Immaculate Heart (Calif. 1	10 Je 55	655	114	60,728		17			
56.	Jamestown (N. D. 1	10 Ju 55	402		24, 326	1.223		255	4,500	1,978
57.	Judgeon (Ala. I	10 Je55	240 616		69,581	1,712	18	158	6,779	2,408
59	Lafavotto (Pa.)	31Ag55	1.479		150,273	2, 215	- 6	500	11,420	1.929
50.	LaGrange (Ga.)	30Je55	196		17, 396	735	5	149	1,167	1,100
81.	Lake Forest (III.)	10 Je 55	665	1.0		1,659	5 7	119	9,700	1,895
62.	Lawrence (Wis.) Lebanou Vailey (Pa.)	30Je55 30Ap55	786		73,807	2,132	6	195	14, 183	1,141
6.6	Lawte and Clark (Oreg.)	31 My 55	1,001	3.8	41,333	2,405	2.2	414	19,3495	3,918
65.	Linfield (Oreg.)	30Je55	515	2.0	49,087	1, 185	6	228	6,000	3,558
66.	Livingstone (N. C.)	31 My 55	393		33,852	1,570	28	153	9,449 17,798	1.616
6.7.	Madage (Tage)	31A#55	303		21,518	2,502	15	269	8,692	2,084
0.9	Manchester (Ind.)	31,7155	766	1	44,265	1,114	1.0	301	7,950	3, 242
70	Marietta (Chio)	30Je55	733	11	139,494	1,402	8	486	12,950	2,850
71.	Marymount (Calif.)	30.le55	130		12,794	812	6	170	11,699	900 2,852
72	Maryville (Tenn.)	30Je55	597		58,842 37,570	1,571	12	231	9,700	2,640
74	Midland (Neb.)	11 My 55	375		29,842	1,249	5	296	9.016	1.094
75.	Millikin (lil.)	303055	911	9	54,634	1, 151	5	253	8,995	1,720
76.	Miliapa (Miss. 1	10 Je55	735	11	17, 291	1,275	5 7	157	12,633	3,478
17.	Munmouth (III.)	113755	710	11	65,500	1.854	7	342	6,096	2,735
79.	Muskingum (Ohio)	31Ag55	796		40,000	1,600		247	9,700	1,700
80.	Muskingum (Ohio) Nobraska Wesleyan	31My55	819		41,000	843	8	250	6,334	2,628

Statistics, 1954-55 Group III

		Operating	Expenditures					Ratio of Library Ex-	Total	
Total Staff Salaries and Student Bervice	Books and Related Materials	Binding	Total for Books and Binding	Other Operating Expendi- tures	Total Operating Expendi- tures	Per Student Operating Expendi- tures	Total Institutional Expenditures	Penditures to Total Insti- tutional Ex- penditures (Per Cont)	Audia- Visual Expendi- tures	
\$13,651 17,500 15,672 20,646 12,662	\$ 6,622 7,131 9,172 10,284 5,603	\$ 421 443 1,050 1,102 708	\$ 7,043 7,574 11,022 11,390 6,311	\$ 463 473 1,124 1,526 594	\$21,357 25,547 27,818 33,564 19,527	\$ 39,92 50,38 67,35 34,00 21,00	\$ 802,573 636,750 1,457,500 738,480 483,569	2.66 4. 1.9 4.54 4.	\$ 172 160	3 4 9
10,583 14,616 17,980 10,344 10,474	4,931 7,968 5,915 3,090 6,892	600 640 548 671 673	5,931 8,608 6,463 3,761 7,564	1,522 2,486 1,160 186 250	17,636 25,710 25,603 14,291 18,209	22,52 30,11 10,80 32,16 23,00	512,063 466,041 717,023 391,485 461,789	3.5 5.6 5.5 3.91 3.9	209	6 7 8 9
11,073 24,513 15,445 19,497 9,205	3,003 9,029 8,815 8,945 4,559	6 1,434 1,320 1,399 441	3,000 10,463 10,135 10,344 5,000	372 459 2, 855	14, 454 34, 975 28, 435 29, 841 15, 037	26,01 24,28 114,00 30,50 20,50	331,174 862,988 364,000 331,640	4, 25 4, 7, 6 4, 5	250	11 12 13 14 19
8,624 ** 16,581 6,175 12,023 16,107	3,691 3,400 1,611 7,069 6,471	146 689 105 552 1,246	3, 037 4, 293 1, 716 7, 621 7, 717	272 1,600 2,159	12,461 21,146 9,491 21,803 24,822	27,69 59.00 32,62 46.10 28,50	313,368 516,388 276,932 432,005 459,632	4. 4.09 3. 5.05 4.9	23 310	16 17 18 19 26
12, 919 4, 726 9, 153# 12, 525 5, 189	2,064 3,109 3,700 4,200 2,706	505 524 700 236	3, 369 3, 103 4, 313 4, 900 3, 022	259 206 226 1,950 307	16,143 8,137 13,693 18,975 8,518	32,00 21,50 47,54 25,27 39,43	\$12,034 497,494 383,994 799,091 100,698	3. 3.6 3.0 2.3	98	21 22 23 24 25
6,875 26,673 15,712 11,328 18,415	2,288 13,300 3,607 5,228 10,156	779 1, 396 950 305 1, 198	3,967 14,696 4,557 5,533 11,354	1, 101 1, 166 2, 870	10, 292 42, 472 20, 269 18, 027 32, 639	39.43 33.15 22.77 14.36 30.63	207, 211 1, 121, 051 450, 110 708, 383 759, 483	4.96 3.70 4.5 2.5 4.3	687	26 27 28 29 30
11,053 13,005 9,106 10,157 11,315	6, 160 6, 422 3, 395 5, 771	902 815 243	7,062 7,237 3,638 5,583 6,394	1,166 1,001 315	19, 201 21, 353 10, 059 15, 740 10, 551	29,27 34,33 43,97 30,74 13,64	576, 277 589, 063 410, 070 550, 773 716, 855	5. 2.2 3.18 4.75	263	36 32 33 34 35
24, 765 3, 861 9, 148 10, 851 20, 300	5,988 2,742 4,648 6,185 8,043	800 64 708 231 1,157	6,766 2,806 5,357 6,416 9,200	534 99 646 1,215	32,007 6,766 15,191 18,682 30,300	6,07 22,40 32,00 26,03 49,02	1,260,000 254,349 356,207 765,095 739,291	2,5 2,7 4,3 2,41 4,09	105	36 37 38 39 40
9,980 17,389 ^m 6,951 9,439 6,305	9,504 8,073 3,969 4,939 3,077	565 756 554 367 497	10,069 9,629 4,523 5,306 3,574	120 1,023 474 2,120 65	20,169 20,041 11,948 16,865 9,964	25.66 29.83 16.68 37.31 18.60	363,194 647,284 310,813 288,000 415,000	5, 55 4, 33 3. 5. 2.29	270	41 42 43 44 45
12,742 12,091 14,408 16,036 10,645	5,512 5,935 6,392 5,699 4,114	953 515 613 459 816	6,465 6,450 9,005 6,158 4,930	1,242 506 1,166 586 1,440	20,449 19,047 24,577 22,780 17,015	41,90 39,43 59,00 28,68 29,28	478, 942 624, 987 621, 175 743, 579 279, 616	4,27 3. 3,95 5, 6,68	274	46 47 48 49 50
8,438 5,229 7,290 17,483 20,860 ²⁷	2, 254 4, 654 2, 484 6, 026 5, 040	971 94 397 649 700	2,025 4,748 2,001 6,675 5,740	1,560 140 308 497 1,040	12,623 10,317 10,479 24,655 27,640	19.72 50.32 35.17 26.92 34.81	425,119 157,418 294,745 691,903	1, 0 6,55 3, 1 3,56	415	51 52 53 54 55
5,274 6,128 9,187 13,349 4,267	4,650 1,048 4,319 10,276 3,035	422 275 467 2,020 104	5,072 2,123 4,006 12,296 3,219	290 411 667 459	10,644 8,251 14,404 26,312 7,945	26,47 34,46 23,33 17,79 40.53	280,026 181,100 387,760 1,665,000 170,730	3,8 4,5 5,7 1,5# 4,67	110	56 57 58 59 60
11,685 15,100 15,341 23,2686 9,558	6, 257 6, 900 3, 794 8, 339 4, 456	296 754 967 559 142	6,513 7,654 4,761 8,898 4,598	1,970 1,625 500 80	20,168 24,459 20,602 32,246	\$1.83 31.11 36.50 31.00	682,636 706,080 391,124 673,762 377,943	2.9 3.4 5.2 5.	\$ 293 435 1,256	63 63 64 65
10,079 21,412 6,776 11,192 15,000	3,787 5,856 1,956 5,065 5,964	297 905 90 521 1,027	2,084 6,861 2,046 5,586 6,991	2,434 1,440 260 625 606	14,597 29,693 9,062 17,403 23,397	37,14 31,26 29,70 22,69 31,45	347, 230 517, 417 190, 024 358, 062 468, 000	4. 5.7 4.7 4.86 4.9	192	66 67 68 69 70
1,400° 14,551 12,340 10,110 10,715	3, 991 5, 144 4, 967 4, 442 4, 497	612 405 394 553	3,991 5,756 5,372 4,836 9,050	293 2,197 811 1,288 647	7,686 21,506 18,523 36,234 16,412	59.10 32.53 31.02 43.29 17.84	366,422 413,012 314,362 607,211	6. 6.47 5.16 2.7	972	71 72 73 74 75
13,463 14,076 6,031 11,400 9,262	2,989 3,284 3,571 7,000 3,712	1,363 434 614 500 351	4, 253 3, 718 4, 385 7, 500 4, 063	1, 934 578 1, 113 500	19, 269 18, 372 14, 329 19, 400 13, 325	26,22 28,61 19,47 24,37 16,27	423,819 551,307 461,852 527,571 379,245	4,5 5,22 5,7 4,2	107	76- 77 78 79 80

College and University Library Statistics,

									Libr	ary
Lin	rary	Fiscal Year Ending	Total Under-	Tital Graduate	Book Stock	Volumee Added	News- papers	Periodi-	Staff Salaries	Student Service
At See Meneo	Meniondo	905-99	6.15	83	62,000	2, 199	16	307	13,500	5,400
	(Calif.)	19Je55	747	25	46,227	1,670		19.9	5,207	7,421
	W	HAg55	26.2		31,072	2,078	4	185	4,089	1,204
	Cant 1	11Ag55	872	9.7	49,989	2,763	5	400	12, 310	3,778
	con (Va.)	10Ap53	649		79,057	1,619	17	169	19,011	197
Mr. Nines (Wite)		367+55	5.51		55,876	1,196	6	290	7,082	1,800
	ine l	20100	409	116	96, 135	3, 520	25	56.6	2,749	1,648
	(Int.)	31,3155	664		60, 114	5,140	14	491		5,568
	non Ut. Y. 1	30 Je55	366	6	67,000	2,428	1.6	129	19,950	1,820
			123	- 4	46,247	1,717	5	94	10, 269	1,24%
M. Samura Coll.	of the (N. Y.) -	10 Je 55	878	1	95,028	2,452	6	144	18,565	1,481
	Ach a consequence	31Ax55	46.7		151,51	1,065	16	209		1,280
	Language	31Ag55	254		30,600	781	3	171	6,000	1,754
	al	16 Ju 55 10	511		42, 335	86.6	5	2.16	5,500	2,598
	Maan-le	31Ag55	816	107	46,201	1, 266	5	14%	7, 100	5, 297
No. Second Raine	(Va.1	10 Je 55	476		84, 155	2,751	10	450	20,067	761
	(a.)	10 Je 55	114		17, 649	1,094	20	150	11,168	1,092
	Lancaster	IIAu55	967		46,000	Z, 637	3.0	413	11, 225	1,623
	feeleyan	31A435	105		19,971	1,016	6-	145	4,500	1, 119
	1	10 Je 55	487		67,812	3, 411	2.0	201	2,200	2,576
101. Tuersham (T.	enn.)	10 Je 55	108		25,750	608	5	142	2,910	185
		10 Je 55	的正在		54,278	1,610	7	36.4	5,406	6,815
	1	10 Je 55	6.82		44,921	1, 379	10	201	16, 234	2,061
	Accesses	31My55	470		13, 186	1,647		241	7, 100	928
	Military	30 Je 55	420			1,827		226	9, 100	1,085
106. Washington a	and Jefferson (Pa.)	10 Je55	515	11	87, 193	1,830	5	305	9,860	1,831
	nd Lee (Va. 1	103e55	929		162,527	5,472	12	405	20, 231	800
100. Western Coll	, for Women (Chia)	10 Je 55	279		49,210	1,114	9	234	6, 200	1,545
	h	31Ax55	1,649	99	102, 145	2,069	8	54.8	18,682	3,692
	if.1	HAKSS	967	2.9	57,207	2,185	8	453	12, 109	4, 899
III. Withselvers	(Ohio)	10Ap55	275		16,006	4,775	75	296	6,600	3,240
	Oreg.)	10.5+55	891	1.8	54,527	1,659	7	312	12,590	2,835
10	gh		3, 975	26.9	150,271	4,472	75	576	23,819	7,421
	edian		5.61	1 46	44, 265	1.579	8	278	9,350	1,929
	19		1.10	1	12, 799	195	0	74	2,200	385
14			112	2.6	111	111	111	112	108	111

1. Central library and all agencies. Z. Resident and special students (no person counted twice). J. Includes supplies, transportation, and all other noncapital expenditures not specifically reported. 4. Exclusive of capital expenditures and those for number of the contract of the contr

College and University Library

		Associate of Assistant Chief Librarian			Den	artment He	arte	All Other Professional		
	Library	Librarian		Maximum		Maximum		Minimum	Maximum	Number
L	Agnes brutt (tos.)	8	8	8	8			5	8	100
	Alabama College							4, 100		100
	Allegheny (Pa.)							4++		1
5.	Anderson		2.6.4		Y 1 1	4 + 3		4.7.5		
	Arkaneca A.&M		1,900	4,100				1,750		1
	Arkansas State.		111		***		1			177.00
19.	Ashland (Okso)	8,000		13.7					2,800	1.75
10.	Augustana (S. D.)	4,120	3,920		4.4.7		444			
	Aurera (Lif.)		+ = =		1,400	4,100	1.		3,720	***
	Bard (N. Y.)		4 1 100		2,800		1			1
	Bates (Me.)		3,400		. + -			1,700		1.25
16.	Bennett (N. G. L	3,036		111	1.4.5		400		4.5 4	411
17.			* * *	4. 5. 1	4 2 2		1	4.0.1	W	***
18.			2.00		4 5 5		4++	- 4 -		411
19.				4.7.1	3, 350		2			****
20.	Birmingham-Southern [Als.]	4,200	200	4.76	47.004	* * *				

		Operation	g Espenditur	0.0		Per		Library E.g.	Total	
Total Staff Salaries and Soudent Service	Roobs and Related Materials	Binding	Total for Books and Binding	Other Operating Expendi- tures	Total Operating Expendi- tures	Student Operating Expendi- tures	Tutal Institutional Expenditures	Total Insti- tutional Ex- penditures (Per Cent)	Audio- Visual Espendi- tures	
18,900 12,708 7,352 16,065 19,406	#,000 %,7#9 #,727 7,918 %,866	2,226 967 239 1,346 755	10,228 6,756 1,966 9,264 6,599	2,072 7,283 13 1,092 830	31,200 26,747 11,281 26,444 26,843	48,67 34,65 41,06 28,46 41,16	646,760 661,611 219,906 588,215 8,073,946	4.8 6.06 4.7 4.5 2.9	116	81 62 83 84 89
H, HHZ 19, 195° 17, 185° 21, 770 11, 515	9,456 7,817 8,629 7,636 3,265	787 2, 108 301 936 348	6,245 12,127 9,010 7,966 3,613	1,643 1,767 1,597 1,509	15,676 33,163 27,959 51,313 16,637	29.50 32.67 42.10 84.00 71.71	498,503 550,934 604,941 530,000 427,905	1.14 6.02 4.6 5.	1,521	86 67 68 89 90
20,046 9,280° 7,754 8,098 12,597	6,589 3,210 1,647 4,730 5,500	1,478 197 160 350 500	10,067 3,635 1,607 5,080 6,000	1, 177 521	11,490 13,436 9,564 13,178 18,897	35,74 20,77 46,19 25,78 20,01	585,517 263,680 225,151 376,378 1,015,000	4.6 5. 4.25 5.19 1.0	50	91 92 93 94 95
20,828 12,260 12,249 5,859 14,176**	8,865 9,985 9,980 2,520 9,587	1,420 100 1,250 312 1,244	10,285 4,285 11,230 2,832 10,831	902 686 489 1, 298	32,015 17,191 23,478 9,180 26,505	67,00 54,75 24,26 30,09 54,43	736,295 269,238 430,994 251,059 387,981	4. 6. 5.10 8.7 6.6	356 176 200	100 99 97 96
3, 135 12, 221 12, 297 8, 220 10, 185	1,822 4,709 4,444 1,916 2,716	40 736 350 505 75	1,062 5,445 4,602 4,621 2,791	989 192 14 308	5,197 18,655 17,291 12,663 13,486	51,04 22,64 25,35 26,94 32,10	156,147 446,288 301,446	4.18	160	101 102 103 104 109
13,691** 21,031 8,370** 22,374 17,268	6,522 10,288 5,100 8,652 8,197	160 1,149 750 2,215 1,678	6,682 11,637 5,850 10,887 9,875	2,600 863 200 1,555 296	22,973 33,531 14,420 25,816 27,379	41.00 36.24 53.00 14.76 26.68	510,000 929,414 555,649 1,109,952 771,786	4.3 3.6 2.58 2.3 4.3	164	106 107 106 109 110
9,840	2,500 6,771	500 611	5,000 7,582	686	12,040 23,493	47,00	225,000 577,000	4.		111
26, 673 12, 091 3, 115	15, 500 6, 512 1, 611	2, 108 565 6	14,696 6,000 1,116	7, 203 647 13	42,472 18,975 5,197	114,00 30,74 8.07	1,665,000 483,569 100,690 107	11. 4.09 1.58	1,869 209 16 37	High Median Low N

Salary' Statistics, 1954-55 Group III

M.c.mum	All Nonprofessional Assistants Maximum	Number	Total No Full Pro- fessional	mber of Employer - Time Equivalent Number - feetional	Total	Working House in Fiecal Year	Hours of Student Assistance
8	1	 7 1.5	1.5 0. 5.5 1.	1. 2.7 1.6	4.5 4. 2.25 7.5 2.5	1, 744 2, 080 1, 752	1,700 1 4,710 4 1,863 3 3,666 4 3,177 5
	2,400	1.5	2. 2. 3. 2.75 2.	1.6	2, 3, 5 5, 2, 75 2,	1,860 1,850 1,850	4,393 6 6,753 7 3,445 6 4,457 10
2,200	2,529	1.75 4 3.5	1,83 4. 2,5 4. 3,25	1.75 2.5 2.	3,58 6,5 5,5 5,	1,568 1,777 1,741 1,400	3,920 11 2,600 12 2,500 13 3,162 14 900 15
2,800	***	1	2. 2. 2. 3.	1. 1.	2. 4. 2. 3. 4.	1,816	3,705 16 1,156 17 1,870 18 7,056 19 5,182 20

College and University Library Salary

			Accordes on					All flows Bushinston		
		Anniatant					All Other Professional			
	200000		Chief	Librarian	Dep	sertment H	cade		Assistants n Maximum	Number
	Library			Maximum		Maximum		Minamar	n Maximum	Number
21	Catawha (N. C.) Cedar Creet (Px.) Chapman (Cailf.) Cos (Drea) Cubes (D. C.)	4, 200	2,950		2,900		1			
2.1	. Cedar Crest (Ps.)	1,700	1 54		:::	++-	2.77	+++		4 = 4
- 11	Chapman (Calif.)	1,500	3, 100			:::	111	3,600	4,800	12"
23	Caper (D. C. L.	1,000	***						2,400	1
24	. College of the Gearks (Ark.)	3,800			7 feet	4,500	4	3,200	3, 700	1.62
21	College of the Pacific (Calif. L.	6,600			4, 200	+ + +	+++	-++		2
29		4,000	3,500		***		717			***
30	Davidson (N.C.)	5,717			3,087	3,237	2	441	4.4.1	23.5
31		3,900			3,900	3, 150	1		0.00	21.5
12	Elmira (N. Y.)	5,000			1, 800					***
1.6	Elmira (N. Y.)	4, 320	1,820				414			11.1
15	Evansville (Ind.)	4,690	1,675				111			***
15	Fenn (Ohio)	2 444	4 2 7					3,600	- 4.4	3
18		1,840	1.65	2.7.5	111		*11	1,200	:::	31
19	George (Pa. I.	4,100	3,800					3,000		1
6.0	Geneva (Pa. J	3,500	1 * 1		3,706*	1,800*	3			+14
67		4,600*	4,200		3,800	4,150	2			1100
67	Hastings Dieb.	1, 800	:::	200	2,000	4,150	***	101	111	111
61	Hendrix (Ask.)						411			
61	Hilledale (Mich.)	1,800	6.4.4					0.00		
4-										2
67		5,500	4, 200		1,700		1	2,599	111	î
48	Hood (Mt.)	4,100		177	2,900	3,200	i	2.300		
69	Hope (Mich. J.)		4, 100	4.1.5	2,900 3,700 1,500	4	1			
50	Hope (Mich. J	2,805	177	* * * *	1,500		1	100	+ + *	4.0
		4, 100	2,075							
25	Huntingdon (Air.)	4, 100		+ + +	7.55	+	***			
53	Bustington (Ind.). Illiants College Lineas Wesleyse	4, 100						5,600	3,650	
5.6	Himmie Wesieyan	4,500			3, 300		1			.75
5.5	Immaculate Heart (Calif.)	1,800	3,200	3,800	3,200	3,800	1			
14	Jamestown (N. D.)									
47	Judson (Ala.)	3,800		111		***				
18		3,879		2,900	17.7			471		
1.9	Lafaverte (Pa. I	5,000			122		411	4 4 3		7
5.0	LaGrange (Ge.)	3,000	* * *		17.7		+++			11.50
41		4,090						2,600	3,100	2
4.7	Lake Forest (III.)	5,900		4,050		3,700	1	2,000	2,100	
41	Lebanon Valley (Po.)	3,900	2,800		4.4.4	4 + +	***	1,290		3
6.6	Lebanon Valley (Pa.) Lebanon Valley (Pa.) Lewis and Clark (Oreg.)	5,100	4,000				***	3,100	3,950	3
45	Linfield (Greg.)	4,200					400		1,800	1
66.		1,485	1,150	3,200	2,000	2,000	1			
6.7	Livingstone (N.C.)	5,800	1.1.1	111	4,000		Z	1,100		T
0.81	Madison (Teon.).	8,012			111	777	. 5			***
69.	Lather Madison (Test.) Manshester (Ind.) Marshester (Obio)	4,175	1,000	3,800			"i"	2.00		100
79.	Marietta (Ohio)	5,000	1,000	1 1 1	3, 100		k .			
71.	Macamana (Calif.)									
72.	Macanille (Two)		10.0							***
73.	Meredith (N.C.)						414			
74.	Midland (Neb.)	4,600	1,200		1 2 2		4 - 4		3,600	.67
75.	Millikie (DL)	4,250*	4,000*	100		1.4.4				411
76.	Millsape (Miss.)		4,056	4,056				2,700	3, 100	2
77.	Monomouth (III.)	4,000	3,500			111				
78	Muskingam (Ohio)	1,900	2, 300	2		1.5.5		1,000		2
79.	Muskingum (Ohio)	1,800		+ 5 4	1.00	4.4.4),800	1
80.	Sebrasha Wesleyan	4,600	9.4.4	111			* * *	2,600		
Di.	New Mexico Highlands	8	\$4,800	\$6,900	8	8		\$4,900	\$5,290	1
61.	Pacific Union (Calif.) Parente Union (Calif.)	4, 200						+++		4 1 1
8.5	Parama Grant					* * *				
05	Pepperdine (Calif.)		100	111	1,000	4,000	.2.			
200					4 - 44	41.000	-			
84.	Ripon (Wis.) Si. John's (Minn.) St. Joseph's (Ind.) Sarah Lawrence (N.Y.)	4,000			0.00		511			7
87.	fit. John's (Minn.)	6,000	5,000			+ + =		1,000		1
89	Street Lawrence CV, Y.)	5,200	8,500				***	2,500		1
90.	Scrippe (Calif.)	+ + +	4,500			444	***	4 4 4		***
91.	Senera, Coll. of the (N. Y. I	4,650	3,600	3,000	3, 100	4.1.1	0	4.5.4	1,2,5	
92.	Setzo Hill (Pa.)	1,000		3,000			+++-	4 + +	-4+	.5
14	Sumpson Gows!	4,000	3,500	1.00						
95.	Springfield (Mass.)									
96.	Sweet Brier (Va.)	4,800	3,400		3,400		1	3,000		+
97.	Yamma (File)	4, 100	1,115	3.44				1,700	3,800	A.
99	Sweet Briar (Va.) Talladega (Ala.) Tampa (Fla.) Tampasse Wexleyen	3,600	111	111	717					
100.	Trusty (D.C.)	* * +				* + +	100	5,000		1
101	Tusculum (Tenn.)	1, 100	1 2 2	2,529	4.4.5	4 4		* * *		1 + 1
103.	Union (Neb. 1	4,700	4,000	2,949				111		
106.	Variousta (fire.)	6,000	A, 100							
10%.	Washington (Md.), , ,	5,100	3,860							

Statistics, 1954-55 Group III - Continued

31 311			Total N	umber of Employe	00 (0	Working Hours in	Moura of	
	All Nooprefessional Assistante		Pru-	Nongro- fessional	Total	Fiscal Year	Student Resistance	
Minimum	Maximum	Number	formonal		3		2, 582	21
73.5	4.1.4	1	3	1	Z	1,444	2,606	22
1,700		i	2	1	3	1.980	2,850	29
111	3,000	1	2 2	1	2		6.5	29
				***			4,100	26
		***	***	100	5.87	1,710	4, 875	2.7
443	* * * *	444	5.87	5.5.5	3	1' 441	4, 570	2.80
	3,400	8	1	2	3	1,811	4,784	10
2,500	1.11	444	***	40.0			4, 100	
			3	1	4	1,760	2,803	31
1,100	2,500	1 1	ž	1.	3	1,800	1,274	33
2,000	1.7.7	10.00	ă.	2	3 2	2,024	7,237	14
		1	2 2	1	5	2,000	1,000	16
2,160	12.5					1.704	946	96
2,400	4.64	2	4	2			653	37
		***	1 2	***	Z.	1,892*	3, 508	19
1111		153	2.5		6.5	1,665	7,000	40
7.5.5		199	4		9			
2,518	3, 160	8	2	2	4	1,800	3,514	47
1,800	2,400	1.5	3	1.5	4.5	2,029	2,050	41
		11.3.3	à.	711	A.,			-6-6
1,500		***	1	3	2	1,368	842	45
1,500	* * * *			1.9	4.81		1,761	46-
	4.4.4.	1.9	1.33		3	1,600	222	47
	222	***	3	.57	3.57	1,476	5,501	44
100	111	. 9	3	1.01	3.5	1,450*	4, 6001	10
	4.4.7	1.03	1.5	1.00				
			R.		2	1,420	2,600	11 12
	4.6.4	411	1.5	36	2	2,110	1,810	5.5
	* * *	4.5	3.5	. 3	4		6,445	54
2,600	3,000	i i	4	1	9	1,040	11.1.1	55
4,				1	2	2,112	1,547	56
	+ 7 A	200	ì	4 * *	2.5	1,120	4,946	57
	***	. 5	2	2 3	1.5	1,760	2,575	59
1,620	2,800	A.	1.5		1	1,449	2,550	68
1 + +		1.57	*				2,845	61
4	* * *	8	3	2	5	1.998	1.793	62
1,920	2,400		6.5		6.9	1, 664	1.992	6.3
2,400	2,700	2	5	2	7		5,425	66
++ *	F 7. F		2	***	2	***		
			2	2	6	1,950	5,100	86
111	***	***	6	2.5	8.5	1,750	4,418	6.8
	+ = *	2.00	1.5	***	5	1,640	4,988	4.9
+ + =	2.7.1	.75	3	.79	1.75	* * *	5,700	78
4 7 4					1		1,200	71
4 - 7	1.7.5		1	***		1,824	5,867	72
	* * *	1	2	i	3	1, 126	1,823	75
	100		2.66	1.5	2.66 2.5	1,880	2,635	75
	2.77	.5	2		4.7			-
2,700	2,700	1	3.5	11.7	273	4.4.4	1,640	76
2,100	1 5 5		. 2	64.1	2	1,680	4,508	7.6
	4.47	***	1	444	3	1,554	4,180	80
111	111		2		Z	1,600		
			3		5	1,840	9, 869	81
8		1,75	2	1.75	1.75	1,868	6,656 Z,400	03
			2	8.9	4.25	1,840	4, 711	84
	4.4.3	2.5	Z. 75	2.5	6.5			- 05
		4.2				1,840		86.
2,400	9,000	2	0	1.5	2.5		1, 216	67
1.500	100	2,5	1 2	. 5	2.5	2, 104	4.472	88
2,500	3,400	2.5	. 1	2.5	5.5	1,700*	2,40%	73
2,410	* * *		Z	(4.9	2			
		3.3	3	3.3	6.3	1,637	2, 116	91
2, 140	100		2.5		2.1		2,561	93
				7.8	1.5	1,840	9,246	74
100		3,75	ž	3.75	5.75	1,826	2,028	95
					9	5,689"	1,268	96
1,766	2,200	3	4.	9		1,500	2,178	97
1,510		2	3	+++	3	2,156	2,046 2,679	7.6
10.1		***	1	.5	3.5	1,3500	3,927	100
		464	3	4.5	2.3			
			1.	244	2"	1,920	11,866	101
17.4			I.		2.67	1,608	4,750	101
		. 67	2	.67	2	1,908	1.497	194
		744	2	***	2	1,400	1,600	105
	1.4.5							

College and University Library Salary

			Assistant Chief Librarian				ada	All Other Professional Assistants		
	Library	Librarian	Minimum	Maximum	Minimum	Maximum	Number	Minimum	Maximum	Number
166. 187. 168. 169.	Washington and Jefferson (Pa.) Washington and Let (Va.) Western Coil. for Wuman (Ohio) Wheaten (III.). Whittier (Calif.)	3,890 4,650	4, 258 3, 760		3, 675 3, 000	3,780 3,450	**** ****	2,620		1
111. 112.	Wilberforce (Ohin)	3,600 4,800	3,000	3,300	3,600	:::	ï	2,100		1
	Madian Madian	7,000 4,200 2,737	5,056 3,500 2,300	6,000 3,800 2,529	4, 200 3, 300 1, 500	4,500 3,780 2,000	2,5	4,100 3,000 2,100	5,200 1,600 1,800	1,5

No. 68 36 11 24 29 25 26 14 37

I. For 9 months; usually each person works one term of summer session; add 6 weeks pay same rate. Z. Approximately.

Summer School salaries not inclinded. 4. Includes salary for part-time teaching. 5. Range from 1, 472 to 1, 892. 6 25.750 charged to Instruction. T. Excludes special pay for teaching. 8. For 10 months. 10. Kange 5, 200 to 7, 000.

Teachers College Library

									Libra	877
			Student E		mt.					
		Fiscal	Total	Total		Websers	Manne	Periodi-	Stati	Student
(4)		Year	Under-		Stock	Volumes Added	papers	coin	Seleries	
	Library	Ending	graduate	210	23 F CAL BI	Month	bahara	. 610		
	Alabama, Jacksonwille, fitate Teachers Cell	10515	1,836		25, 838	2,049	8	271	\$ 6,490	\$ 3,375
- 1	Alabama, Teny, State Teachers Coll.	30555	1,070		40,914	1,891	1.1	268	10, 149	4, 311
	Alabams, Lavingston, State Teachers Coll	10555	410		29,000	800	23	135	6,900	950
	Arisuna, Tempe, State College	10Je55	1,761*	629*	210, 828	29, 523	10	1,459	59,500	6,500
1		30 Je55	1,001	30	53, 195	5,985	18	542	48,066	4,800
	California, Chico, State College	30Je55	1,876	85	68, 799	5, 324	21	637	49, 296	8,900
	California, Freeno, State College	30 Je55	1,520	127	104, 902	6,856	12	951	80,190	14, 954
	California, Secramento, State College	30 Je55	2, 166	1,462	54, 719	9,927	9	725	54,870	7,874
- 6	California, San Francisco, State College	30Je55	6, 169	1,010	108, 167	9,567	11	901	132, 436	19, 368
110	California, Sun Jose, State College	30 Je55	9,117	417	161, 256	9,092	1.5	1,116	143,774	16,814
	Colorado, Alamosa, Adams State College	30.2e55	548	15	16, 177	2,075	25	370	8,494	3,924
12	Colorado, Geseley, State Colt. of Education .		2,516	2.95	144,666	4,071	35	752	18, 507	11, 308
13	Culuradu, Gunnison, Western State Cullege	SIAges	922	6.5	58,599	2,169	23	414	10, 100	3, 274
1.6	Connecticut, Willimantic, State Teachers Col.	30Je55	4.14		18,794	2,500	2	2.04	11, 322	923
15	Georgia, Collegeboro, Teachers College	30Je55	586		50,812	1,912	15	174	18, 100	2,659
	lilinnia, Charleston, Eastern State College .	307e55	1.579	17	87, 581	4,244	25	585	18,715	8,529
10	Illinois, DeKaib, Northern State Teachers Col.		2,593	236	101, 285	8, 275	1.6	74.1	58, 183	11,201
17	Illinnia, River Forest, Concordia Teachers C.	30 Je35	455		43,585	2,023	6	166	9, 390	2,422
100	Indiana, Terre Haute, State Teachers Coll		2,179		171, 837	3, 545	19	489	13,043	5, 499
20	Juws, Cedar Faile, State Teachers College .	30 Je55	2,716	172	171,860	6,148	3.8	708	53, 239	10,518
	N College	10 Je55	1,486	115	111,964	5, 623	1.1	555	52,538	14, 355
21.	Kansas, Empuria, State Teachers College . Kansas, Hays, Fort Hays Kansas State Col.	30Je55	1,532	112	78, 376	1,870	70	490	27,979	7,843
55	Kanses, Pittobucg, State Teachers Cullege	10 Je 55	1,714		101,910	4,500	40	885	11, 110	11,290
5.5	Kentucky, Frankfort, State College	30 Jun5	637		23, 352	878	30	228	6,746	1,837
25	Kentucky, Morshead, State College	30555	1,210	4.1	49, 338	3, 039	35	403	10,961	1,718
26	Kentucky, Murray, State College	30Je55	1,627	18	52,000	2, 389	15	513	11,890	1,200
27	Kentucky, Bichmond, Esstern Ky, State Col.	10 Je55	1,621	6.9	93, 246	2,636	18	102	19,494	1, 783
28	Louisiana, Hammond, Southeastern La. Col. 4	10,5e35	1,232		49, 223	2,071	10	36.5	27,870	3,627
29	Louisiana, Lafayette, Southwestern La. Inst.	30 Je55	3,180		108,016	4,619	1.5	645	70,695	10,170
30.	La., Natchitoches, Northwestern State Col.	10 Je 55	1,682		74,945	4,991	50	563	45,037	7, 318
**	Maryland, Froatherg, State Teachers Col	10 Je55	494		25,882	1,630	10	239	15, 894	761
	Maryland, Towens, State Teachers College .	10.7e11	1,059		47, 711	4, 254	1.1	245	22, 851	1,099
11	Massachusetts, Framingham, State Teachers C.	30,5450	581		22, 411	164	5	199	11, 366	200
16	Mass., North Adams, State Teachers Col	10.Je55	136	5-8	13, 221	674	2	128	5,400	370
10.	Michigan, Kalamazoo, Western Mich. Col.*.	10 Ja55	9,848	553	195, 319	5,690	22	944	67, 322	10,911
16	Muh., Marquette, Northern Mich. College?	58Je55	735		55, 258	1,992	18	347	19,875	1,800
17	Mich., Ypailanti, State Normal College	10Je55	3,628	231	113, 057	3,702	12	547	47, 996	8, 750
1.0	Minn , Bomidji, State Teachers College	10.Je55	6.01		14, 152	1,408	10	251	13,270	1,460
19	Minn., Mankato, State Teachers College	10.le55	2,688	1.5	52, 127	5,140	7	408	25,501	2, 724
40	Minn, Mourhead, State Teachers College .	10 Just	900	2	15, 475	1, 186	14	337	12, 950	2, 102
61	Minn., St. Cloud, State Teachers College	10.Je55	2, 149	5.0	84, 776	5,570	1.2	466	25, 963	2,711
4.5	Minn., Winung, State Teachers College	30 Je55	5810	42	40,577	1,610	10	297	8, 787	2, 498
41	Mississippi, Cleveland, Delta State College	36Je55	407		37, 298	2,032	11	324	15,650	1,040
44.	Missouri, Springfield, Southwest State Chilege	39 Je55	1,621		84, 195	1, 316	1.0	36-2	22, 309	6,551
60	Nobracks, Chadron, State Trachers College .	10 /055	492		17, 950	911	37	231	7,700	1,597

Statistics, 1954-55 Group III - Continued

Maimam	Ali Nanprofessional Assistante Maximum	Number	Tutal Nu Full Pro- fessional	mber of Employ Time Equivaler Nonpro- fessional	rotal	Working House in Fiscal Year	Mours of Student Assistance	
1,940 1,663 2,010 1,925	2,557	3.5	2 1 1, 5 2, 25	3.5	3 6.5 6.5 6.25	1,920 1,710 1,718 1,920 1,928	2,154 1,260 2,060	106 107 108 109 110
2,400	2,900	1,75	3.75	1,75	4.5	1,440	6,480	111
2,800 1,940 1,440 29	3,400 2,700 2,200 17	4 1 5	6.5 2 1 106	3, 75 1 . 33	7,5 5 1 102	2,304 1,820 1,350 82	11, 884 2, 845 65 106 9	High Median Low N ¹⁷

^{11.} Number of libraries on which high, median, and low are based. 12. Approximately. 13. Varios, up to 1,010. 14. For the one person on paid salary; others up to 2,000.

Statistics, 1954-55

_,,	ratistics, 1934		- Francisco					Ratio of Library Ex-		
Total Staff Salaries and Student Service	Books and Related Materials	Dinting	Total for Books and Binding	Other Operating Expendi- tures:	Total Operating Expendi- tures	Per Student Operating Expendi- tures	Total Institutional Expenditures	penditures to Total Insti- tutional Ex- penditures (Per Cent)	Total Audio- Visual Espendi- tures	
\$ 11,865	\$ 6,251	5 588	\$ 1, 119	\$ 1,902	\$ 20,606	\$11.22	\$ 618,957	1,22	9	1 2
14,001	7, 798	267	8,045	413	23, 139	21.62	500,779	4.6		3
7,850	3,675	1,100	4,825	700	15, 375	12.62	2,365,513	4.5		-
66,000	30, 774	1, 826	14,600	2, 100	102,900	25.76	991 /47	8.9	2,710	- 6
52,866	21,600	1,750	23, 350	12,610	88,846	86,00	****			
58, 196	10, 65	2,410	18,796	2,140	79,140	40.39	1,247,622	6.1		7
95,144	27, 119	4.317	31,050	4,907	131,687	16,10	2,670,720	4.91		8
62,764	16,130	1,800	40,030	6,100	109,874	28.44	1,507,000	6.1	991	9
151,804	19 500	0.469	44,055	4,092	199,951	27.10	1,422,691	5,84	4, 194	10
160,588	46, 720	6,231	52,967	6,912	220,467	24.17	4,070,930	5.42	4, 114	***
	9, 707	2,060	7,707	1, 199	21,524	38.23	386,550	5.54		11
12,418	16,717	Z, 122	10,039	2,011	70,687	25.69	1,465,083	4.62		12
49,817	4,070	1,577	7,667	747	21,568	21.05	357,888	6.0	166.30	13
13, 174	4,372	117	4,409	276	17,010	39.19	407,461	4.1	1 1 1	14
20, 959	4,406	6.36	5,042	2,204	26, 205	46.28	480,028	5.87	188	15
			10 100	2, 356	86,085	53.81	1,628,784	5.28		1.6
67,444	14, 120	2,169	16,285	3,618	104, 195	16.54	2, 241, 141	6.6		1.7
59,584	25,474	5,319	7, 194	115	19, 161	29.52	471,681	4.1		18
14, 642	7, 256	2,200	17, 162	4,795	60,679	24.00	1,859,828	3,0	462	19
63,757	33, 793	9, 201	42,996	17, 265	124,018	41.69	3,063,307	4.0		20
		1 400	26,497	1, 642	97,012	60,60	1,669,465	6.1	2,500	23
16, 893	25,096	1,401	10,140	850	46,812	28.13	875,083	5.34		2.2
15,822	21,560	4,810	28, 376	7,900	78,870	41.80	1,681,480	4.7	150	2.1
42,600	2,898	650	3,548		12, 110	27.76	486, 161	2.5		2.4
18,679	9,991	1, 192	10,941	645	10,267	24.15	605,598	4.9	153	25
			17 475		29,965	17.93	1 242 1/4	*		26
17,090	11,275	1,600	12, 875	3, 526	15,027	20.72	1,057,669	3.3	1,766	27
23,277	7,641	5.65	8, Z24 8, Z17	2,256	41,970	34.72	1,110,353	3.78	35.2	2.8
31,497	4,901	1, 464	26,290	4,747	111, 813	15.16	2,594,033	4.3	1, 191	49
80, 865 52, 355	29, 179	1,193	12, 572	3, 25 3	88,180	52.42	1,741,599	6.05		10
				186	21,016	42.54	461,995	4.54		11
10,857	1,566	407	9, 166	1,451	14,767	24.07	864,840	4.02		17
23,950	6,677	2,689	1,017		15,057	24.00	170,606	3,5	170	.11
11,549	1,516		2,196	119	8,095	42,11	149,079	5.42		14
5,770 76,255	21, 229	2,666	23, 895	2, 369	104,497	16.33	1, 155, 631	3, 1	168.	115
				750	29,925	40.44	778,440	1.87		16
23,675	4, 100	1,200	5,500	1,400	71,746	19.11	2,416,766	3.05		37
56,766	14, 190	1,500	15,600	470	21,160	15.20	504,460	4.2		3.0
14,710	5,060	758	14,718	1,131	64,066	16.31	1,058,945	4.16		19
28, 225	7,084	557	7,641	909	23,692	26.16	581,582	4.04	640	40
					45,572	20.69	1.020.627	4.4	* * 1	41
28,674	11,557	1,422	14, 979	1,919	16,054	25.77	464, 222	1.5		42
11,285	4,508	26.1	4, 76.9	614	21,520	57.54	441,110	5.0		4.3
16,690	5, Z86	777	7,500	014	14, 160	22.00	818,015	6.6	200	44
28,660	6,723	112	2,742	1,090	13,129	12.66	450,085	2.9		49
9, 297	2,410	1110	47.145	1,000						

Library

									14	brary
			Student E	nealle	art					
		Fineat		Tota						
		Year	Under-			Volumes	Nege-	Periodi-	Staff	Student
	Library.		graduate		Block	Added	papers	cale		Service
61	. Nebraska, Kearney, State Teachers College .	103.55	810	4	44, 131	1,485	41	236	\$10.575	\$ 4, 322
	. Mohranko, Wayne, State Teachers College	10 Je55	1,130				8	276	14,000	
	New Hampshirs, Esens, Teachers College	10 Je55	520	16			6	198	8,060	
61	. New Jersey, Glassboro, State Teachers Col	30Je55	1,140*				6	196	13,602	
54	I. N. J., Upper Montclair, State Teachers Col.	10.Je55	1,061	630			7	315	19,878	
51	, New Jersey, Newark, State Teachers College,	30 Je55	979	6.74	61,075	1,676	6	222	21,000	2,584
57	. New Jareay, Paterson, State Teachers Col.	50Je55	975		22, 909	1,367	7	264	18,490	1,500
9.7	. New Jersey, Trenton, State Teachers College	30.Je55	897*	34	74, 256	2,814	7	285	33,460	2, 893
	. New York, Albany, State Teachers College .	31Mr55	1.592*	200	53,987	3,009	7	16.9	\$7,902	1,778
55	. New York, Buffalo, State Teachers College.	11 Me 55	2,417	519	59,000	4,421	6	405	44, 421	1,768
	, New York, Cortland, State Teachers College .	31Mr55			49,672	4,786	6	510	27,402	1,910
	, New York, Oncomto, State Teachers College.			40		3,720	5	109	23,639	1,504
38	. New York, Oswego, State Teachers College .	3186r55				1,466	12	456	13, 515	1,673
	. New York, Plattelningh, State Teachure Col North Carolina, Boone,	3136+55	965	33	39, 137	3, 454	4	382	26,484	825
	Appalachian State Teachers College	30Je55	1,616	264	43,724	3,061	29	401	21,010	8,681
6.1	. N. C., Fayetteville, State Teachers Gullege	Hatel	626		15, 580	1,640	1.5	247	20, 154	2,250
6.2	N. C., Greenville, East Carolina College	10 Je55	2, 146	148		4,721	1.5	488	41,260	7,967
6.3	N. D., Dickinson, State Teachers College	50Je55	353		23, 231	758	16	21.5	4, 200	1, 225
64	N.D., Valley City, State Teachers College,	10 Jo55	405		15, 541	6.09	- 6	195	9,864	422
65	Oblahoma, Aiva, Northwestern State College	10.Ju55	640	19		1,779	7	310	10,206	1,150
66	Chishuma, Derant, Southeastern State Col	10 Ja55	1,565	162	51,062	1,172	27	445	15,733	6,022
67		10/255	929	63	44, 251	848	26	24.5	0,621	1,986
0.0	Oregon, Ashland, Southern Cul. of Education	10 Je 55	650	50	30,498	2,790	12	265	23,940	3,583
	Oragon, La Grange, Eastern Col. of Education .		509		32, 106	4,612	9	185	15,958	7,723
7.0	Oragon, Montrouth, Callage of Education	30 Je55	6.35	16	16, 705	4, 247	30	290	9,770	8,042
74	Pennsylvania, Calif., State Toachers Colloge.	31My55	867		29, 639	964	4	262	4, 372	1,974
72	Penn., Edinboro, State Teachers College	31 My55	402		32, 362	854	10	182	11,720	2,948
71	Penn., Manafield, State Teachers College".	31 My55	550		35, 345	1, 105	23	245	15, 127	1,902
76	Ponn., West Chester, State Teachers College	31.My55	1,955		65,005	1,571	9	150	22, 021	5,587
75	Tennessee, Memphis, State College	10 Je 55	2,918	240	72,508	4,728	10	190	26, 152	4, 267
76	Tense, Canyon, West Texas State College	ELAu55	1,329"	.06	50, 123	3, 104	20	471	28,630	5,894
77.	Texas, E. Tex. State Teachers College	11Au55	1,595	295	124,554	1,877	1.9	354	30, 167	12,820
	Texas, San Marcus, Southwest State Teachers C.		1,715	174	84, 205	1,950	14	462	22,512	6,236
	Tes., Huntsville, Sam Houston State Teachers C.		1,796	176	130,702	7,762	10	541	25,770	1, 298
80,	Virginia, Farmville, Longwood College	39Je55	704	11	62,778	1,602	12	278	20,912	2,102
		10 Je55	1,084		76,599	4,496	14	390	26, 332	1,482
50.			942	56	93, 345	5, 563	1.0	517	23,720	2,992
			1,005		41, 296	1,315	7	280	17,600	2,200
		30 Je 55	600		34, 387	1, 334	20	237	8, 158	2,451
81	Wisconsin, Eau Claire, State College	10 Je55	1, 365		43,493	4, 190	16	292	21,901	1,697
86			1,944	26.0	80,884	3, 259	1.6	503	15,003	3, 445
87.			1,273	7.0 0	53, 753	2, 238	14	271	23,072	2,500
88.		10Je55	999		37,680	1,175	25	278	14, 794	1,475
89	Wisconsin, River Falls, State College	10.Je55	776		10, 102	2,947	14	145	21, 100	2,035
90.	Wieconein, Superior, State College	10 Je 55	046	2.4	57, 828	1,079	10	420	19,470	4,691
	High			1,462	210,828		70	1,459	143,774	19, 368
	Median.		1,139	115	50,937	2,812	15	36.3	21, 155	3,200
	Low		134	Z	13, 221	364	2	128	4, 200	200
	Nºs		90	51	90	9.0	90	90	99	90

Central library and all agencies. Z. Includes all students, on and off campus, taking courses of college grade. Z. Includes supplies, transportation, and all other noncapital expenditures not specifically reported. 4. Exclusive of capital expenditures and those for assistance of capital expenditures.
 Second of the contract of the contract

Teachers College Library

				efant abrerion	Dep	5,232	
	Library	Librarian	Minimum	Maximum	Minimum	Maximum	Number
2 1 4	Alabame, Jacksonville, State Teachers College. Alabame, Teny, State Teachers College. Alabame, Livingston, State Teachers Collage. Arizona, Tempo, State College. California, Arcota, Hombolist State College.	4,700 4,500 7,000	\$3,500 2,600 2,500 4,800	5,500	111	***	
8.9	California, Chion, State College . California, Freene, State College . California, Sacremento, State College . California, Sac Francisco, State College . California, San Jose, State College .	*	5, 252 5, 252	6, 360	4,740 4,740 4,092	5,772 6,360 5,772	4 1 1 4 7

Statistics, 1954-55 - Continued

	Op	erating Ex-	penditires			-		Lebrary Ex-	Total	
Total Staff Salaries and Student Service	Books and Related Materials	Binding	Total for Books and Binding	Other Operating Espendi- tures	Total Operating Expend: tures	Fer Student Operating Expendi- tures	Total Institutional Expenditures	Penditures tu Total Insti- tutional Ex- penditures (Per Cent)	Audin- Visua Espend	1
# 14 ADT	\$ 7,762	\$ 602	\$ 8,364	2 36	\$ 23,277	\$28.47	\$ 545,433	4.2		46
\$ 14,897 17,785	7,747	1,814	9,561	847	28, 193	24.77	5.09, 595	6.7		
9,702	4,620	91	4,711	1,921	15,934	30.06	477,895	3.33	6.5	4.00
15,450	3,110	458	3,568	172	19,190	16.83	519, 218	3.5		49
23,078	6, 164	548	6,712	450	30,240	17,81	865, 793	1.49		50
21,584	4,821	1,243	6,064	500	10, 110	18.17	462,700	6.55	1,422	51
19,990	10,250	210	10,460		10,450	31,23	418,650	7.3	1,855	52
36, 353	8,201	649	8,850	6.03	45,806	49,20	986,910	4,64		5.8
49,680	12,411	2,039	14,472	1,807	65, 959	16.00	1, 312, 590	5.0	507	54
46,189	14, 598	955	15, 153	2,040	64, 382	21,78	1, 127, 141	4,85	290	55
29, 392	11,550	1,500	13,050	999	45,441	18.58	1,146,006	3.6		56
25, 143	9,514	1,596	11,110	765	37,018	10.82	751, 351	4.5	377	57
35, 188	13,982	2,250	16, 232		51,420	35.32	925,286	5.5		16
27, 109	9,203	610	9,815	497	37,619	37,69	7 10, 005	5.2		24
29,691	11,216	2,997	14, 213		41,904	26,22	575,666	7,6		6.0
25.405	0.435	599	4,917	714	20,055	44.02	304, 815	9.2		61
22,404	4, 110		20,588	2,040	71,055	28.85	1, 156, 364	6.2	2,180	68
49, 277	18,499	2,089	723	1,570	8, 795	26,00	254,665	3.53		6.9
5,425	7 7 7 7	723	2,618	72	13, 176	\$2.55	150, 907	5.67		6-4
10,286	4,641	107	5,002	1,092	17,450	24.40	428, 167	4.0		6.9
	10.100	500	10,937	2,900	35,593	20.61	601, 173	6.0		6.6
21,755	4,650	401	5,051	9.16	16,596	16.73	544, 150	1,05		6.7
10,609	11,270	1,150	12,416	7,882	47, 621	60.31	507,978	9.4	1,622	5.0
27,523	10,668	714	11,382	2, 274	37, 337	73.00	426,733	8.7	7,708	69 76
23,681	13,257	914	14,171	1,468	33,451	51,30	612,049	5.4		7.0
	7,087	299	7, 386	201	13,933	16.84	6.00, 843	2.1	111	71
6, 346	7,171	199	7, 379	204	22, 322	55.53	601,863	3, 67		73
14,668	4,098	1.60	6,278	196	20, 797	17.88	767, 668	2.7	2.7.2	74
16,129 28,008	9,716	629	6, 345	56.2	34, 715	17.75	1,200,018	2.9		75
30,619	25, 320	1,107	26,427	3, 386	60,433	19.10	896,720	6,7	820	1.5
	10.092	1,713	11,805	2,236	48,565	34.32	458,527	10.8	6,920	76
14,524	12,058	950	11,000	1,867	57,862	30.61	1, 211, 951	4.08	2.2	77
41,997 28,768	11,284	1, 167	14,651	6.76	44,095	23.36	1,019,100	4.3		79
29,086	11,603	686	12, 281	717	42,065	21.87		3,93	931	80
23,014	5,288	1,012	6,300	652	29, 966	41.91	815,927	3.6		
29,814	15,250	1,426	10,684	1,406	47,904	44.19	741, 143	6.4	148	81
26,712	20,200								2 14	81
19,800	8,600	640	9, 240	875	19,915	19.81	186,000	3.4	2,170	84
10,609	5,156	441	5,601	1,789	17,999	29.99	317,728	5,66	135	85
23,598	6,351	1,144	7,495	1,015	32, 128	23,53	589, 817	5.45	1,35	
18,449	13,460	2,773	16,233	750	55, 431	25.15	1,115,100	4.9		86
25,572	6,500	750	7,250	10,775	43,597	14,25	629,016	6.9		6.0
16, 269	1, 164	160	5, 320	134	19,751	19.74	511,759	1.0		89
23, 335	6,943	91	7,036	1,574	31, 945	41.16	529,601	5.6		9.0
24, 169	7, 532	6.84	8, 216	712	33,097	19.02	511, 917	6.46		
160,580	46,735	9,203	52, 967	17, 265	220,467	86.00	4,070,918	10.8	7,708	High
	8,401	955	9, 166	1, 199	34,767	28.85	684,511	4.57	507	Low
5,425	1,516	91	723	36	8,085	11.22	254,665	2.3	2.2	2010
90	88	87	89	81	89	89	86	66	3.3	

^{9.} Includes some part-time graduate students. 10. Encludes campus school libraries. 11. Encultments are equated to full time.

12. Includes solaries of three departments of library science instructors. 12. Number of libraries on which high, median, and low are based.

Salary Statistics, 1954-55

	ther Professi	onal	All	Nonprofessio Assistants Maximum	nai Number		Time Equival		Working Hours in Fiscal Year	Hours of Student Assistance	
Minimum	Maximum	Number	B01012771471	Man Williams	to desired t	100010000					
\$ Z, 700 3, 000 4, 092	\$2,700 4,000 5,232	2	1,000	2,500	10	2 2, 6 1 1 0	1 0 1 0 5 0 5	2.6 2 19.5 11.5	1,760 1,820 1,833 1,824	6, 734 10, 368 1, 165 4, 700	E
3, 900	5,232	2 9 5	2, 772 2, 772 2, 640	3, 726 4, 296 3, 720	1 11.5 8 14 23	8 1.2 1.1 2.2 2.1	2.5 9 8 14 17	10.5 21 19 36 38	1,824 1,76H 1,888 1,845 1,81c	9, 364 17, 023 8, 424 20, 387 18, 108	6 7 8 9

Teachers College Library Salary

			Associated Li	etant	lie; Maconum	nertment He Maximum	ade Number
	Account to				Meserronam		
S. Georgias, Guilgedone, Tanabare College 5,169	12. Colorado, Graziey, State College of Education	9,000	4,500				
	14 Converting, Wallimentin, State 7 carbers buildings	5,580					
	18. Georgia, Collegeboro, Teachers College			* * *			
12. Rozest, Empories, State Teachers College 1, 1, 100 1,	16. Illinois, Charleston, Eastern State College	9,220	6 270		5,940	6,169	
12. Rozest, Empories, State Teachers College 1, 1, 100 1,	17. Illinnis, DeKalh, Northern State Teachers College	3,950					
12. Rozest, Empories, State Teachers College 1, 1, 100 1,	19. Indians, Terra Haute, State Teachers College	6,900			4 440	5,400	- 1
12. Encode, Mayer, Fort Shaye Kaness State College	20. lows, Cedar Falls, State Teachers College	7,100	, , ,				
13. Renning Particleury State Teachers College 4,500 1,500	21. Kanses, Emporia, State Teachers College"	5. 626	4.455				
1. Rennich, Frankfort, State Cultings	21. Ranass, Pittsburg, State Teachers Gollege	6,180					
	24. Kentucky, Frankfort, State Cutings			1,700			
		4.500	1.000	1.800			
	1) Restucky, Birtmond, Eastern Bantucky State College	4,650	4 + 1				
	18. Louisians, Hammond, Southeastern Louisians College	7,466	2 500	7 110	A 255	6.250	
Maryland, Franching, State Teachers College	10. Louisians, Nationalist, Southwestern Louisiana Institute		7,000				
1. Managam, Kalamanna, Wastern Michigan Cullings		5.417*					
1. Managam, Kalamanna, Wastern Michigan Cullings	11. Maryland, Frostberg, State Teachers College,						
M. Michagen, Marquette, Barchere Michiges Callege	11. Massachusetts, Framingham, State Teachers Gollege	6,100	4.4.4				
1.	14. Michigan, Kalamasov, Western Michigan College		6,275		5,800	5,900	1
1.	M. Michigan, Marquette, Northern Michigan Coilege	5,975					
1.	IV. Michigan, Ventianti, State Normal College	7,050					
1.	18. Minnesota, Bemidji, State Teachers College	5, 160	5,600	17.1			
44. Minnesenta, Wannous, State Teachers Coilings	40 Minnesota, Mourhand, State Teachers College	5,760			4, 320		1
44. Minoresotts, Winoros, State Teachers College	41. Microsuta, St. Cioud, State Teachers College		5,920			4.7.7	
	42. Minnesuta, Winnes, State Teachers College	4,800	4,686		4.129	4, 120	2
	44. Missouri, Springfield, Southwest State College	5,263	5,245		4,280	6,601	
47. Nebranke, Wayne, State Teachers Coilege		4,520	4,620				
15 New Jarsey, Wyper Monthister, State Teachers College 4, 560 5, 180	46. Nebraska, Kearney, State Teachers College	5,450		4 100			
15 New Jarsey, Wyper Monthister, State Teachers College 4, 560 5, 180	48 New Hammahire, Kasse, Teachers College	4,300	3,610				
15 New Jarsey, Wyper Monthister, State Teachers College 4, 560 5, 180	49, New Jersey, Glassburn, State Teachers College	6,100	4,020	5,220		0.00	100
Name Jaraney, Paintenness, State Teachers Collings	Mi New Jersey, Upper Montelair, State leachers Courses			4, 720	3, 600		
Solitation State Fearbert College Solitation So	11. Hew Jarany, Hewark, State Teachers College,				4 + 1		
Solitation State Fearbert College Solitation So	52. New Jersey, Paterson, State Teachers College,	7, 350				111	
New York, Cortiand, State Teachers College	C4. New York, Albany, State Teachers College	6,996	5, 105				
	56. New York, Cortland, State Teachers College	6,726	4, 198				
	18. Hew Vork, Oamego, State Teachers College.	6,906	4, 190	5,448		4.1.1	
	59. New York, Plattsburgh, State Teachers College	5,676	4, 170			4. 039	2
Dishamma Aira, Northwestern State College	All, Marth Carolina, Boone, Appaiachist State leachers Col.	3, 250			4, 200	*****	
Dishamma Aira, Northwestern State College	61, North Carolina, Fayetteville, State Teachers College	7,569			4,240	5,428	4
Dishamma Aira, Northwestern State College	63. North Dakota, Dickinson, State Teachers College	4,300					
1.	84. Nurth Datuts, Variov City, State Teachers Cuilege	0,125	1,425				i
10 10 10 10 10 10 10 10		* 695					4
Design	67. Oklahoma, Wantherford, Southwestern State College	5.500	0,510				
Prince P	AR. Gregor, Astland, Southern College of Education	6,000		* * *		5.400	1.8
Prince P	59. Oregon, La Grande, Eastern College of Education 1 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2		4,650				
		4.100					1.6
	71. Pennayiyania, California, State Teachers College	6,060	6,000				
Trans. Canyon, West Torse State College	73. Pennsylvania, Manafield, State Teachers College	5,599	4, 950	1 6 Ash			
Trans. Canyon, West Torse State College	16. Panneyivania, West Chester, State Teachers Chiloge		4.950			*	
Tease	76. Tenne, Canyon, West Topus State College	6,420	9,220		2,000	4,200	
Press	71. Teans, Commerce, East Tean State Teachers College .		9,320		3,500	4,600	2
10	78. Texas, San Marcus, Southwest State Teachers College 79. Texas, Hudaville, Sam Houston State Teachers College	7,153			1,607	4, 470	2.9
Macanalla, Glenville, State College 5,000 5,100 5,200 2	40 Vincinia Recognitie Languaged College	6,450					
Macanalla, Glenville, State College 5,000 5,100 5,200 2	81. Virginia, Harrisoshurg, Madison College,	5,420			4,520	4,720	
	8). West Virginia, Fairmors, State College	4,800			111	1,700	
## Recomments, Chabacak, State Coolings 6,000 4,935 5,200 2 ### Wiscomments, Platteville, State Coolings 6,000 4,935 5,200 2 #################################	85. West Virginia, Glenville, State College				5,100	5,250	2
## Recursols, Cathauch, State College 6,000 4,935 5,200 4 ## Wassness, Platteville, State College 6,000 4,935 5,200 4 ### Wassness, Siver Falls, State College 5,475 ### Wassness, Superior, State College 6,300 ##################################	St. Winconnin, Milwaukee, State College	6,890			4,415	5,790	
#G. Wiscomann, River Falls, State College. 5, 475 #G. Wiscomain, Superior, State College 6, 300 #High . 9,220 7,250 7,250 6,250 6,360 8 Median 5,750 4,550 5,468 4,523 5,200 3	87. Pierusain, Ostanak, State College	6.000			4, 935	4,200	2.
96. Wisconsin, Superior, State College 6,300	Pi, Wierman, River Falls, State College.	5,475					
Median 5,730 4,650 5,448 4,523 5,290 5	W. Wisconsin, Superior, State College	6, 300				* 4.1	
Median 5,730 4,650 5,440 4,523 5,200 5	High	9,220	7,250	7,200	6,250	6,360	
	Median	1,730	4,650	1, 110	4,523	3,700	1
50 41 17 12 29 38	Low	76	41	17	5.6	29	38

^{1.} Central library and all agencies. 2 Excludes student assistants and building maintenance staff. 2 Excludes vacation and legal buildays. 4 Not caported or not available. 5 For 10 months. 6 For 12 months. 7 For 9 months. 8 Professional

Statistics, 1954-55 - Continued

Statistic	ther Professi		All	Numprofessio	nal .	in Full-	ther of Empl Time Equival	ents	Working Hours in	Hours of Student	
	Assistants		Minimum	Assistants	Number	Pro- fessionals	Neepro-	Total	Fincal Year	Assistance	
Minimum 3, 400	6,100	Number	2,400	1, 200	2.	2 9 2	1	11	1,960 1,960 1,840	6,371 16,331 5,456	11 12 13
			2,460	3,420	2	6	2	4	1,165	5, 118	16
									1,480	13,036	16
6,160	9,910	2	1,980	2,939	6 2	6	2.5	11.5	1,650	17,712	17
4,840	5,280	2	2,400 2,460 2,660	2,940	2	1	2	3 8	1,772	8,090	19
3, 600	5,040	8	1,920	Z, 940 Z, 900	6	7.5	5	12.5	1,665	16,230	2.0
4,100	4,000				2.5	12	2.5	14.5	1,780	22, 677	23.
35.285	4,050	3		:::*	2	9	1	0 7	1,200	13,107	22.
1,000		1	1,800	2,100	1	3	2	3	1,866	4,536	24
2,000		994	1,800		1	4	1	9	1,720		26
		4			1**	4	0	4 7	1,512	8,000	27
2,600	6,000	9	2,600 2,580 2,600		1	5	i	6	1,487	7,200	28
5,622	9,937	5	Z, 400 Z, 200	4,000	3	10	4	11	1,645	17,211	30
4, 250	6,750			4.282*	2	1.8	1.8	3.6	1,3667	1,921	3.1
		***	2,629*	4,242	A	4	1	7	1,761	1,819	3.0
					414	2	0	1	1,680	5.005	35
5,000	5,800	4	2,760	1,080	4	9		6.5	1,225	15,048	
5,775	5,775	2			2	3		3 9	1,368	2,850	16. 37
0,000	4,729	3	6,224	3,200	1	2	1	3	1,640	12, 192	16
4, 224*		1	3,360	3,674	2	3 2	0	5 2	1,860*	1,400	40
					4	4			1,786	4,517	41.
		122	2,100 2,100	2,892	1	2	0	2	1,476	2,600	42
77.7	12.1		2,820	4 2 2	2	3	1	4 5	1,420	1,474	44
***	1.4	477	1,925			2	- 2	2.2	1,720		-
	1.00				-10			3"	2,026	5, 100	67
						2	0	ž	1.400	2,736	49
		410	2,160	3,120	1 2	2 4	1.5	5.5	1,600	1,000	50
			2,100				1		1,425	3, 196	51
1,720	4,200	2 3	3,000	1.11	1	4.	0	6	1.688	2,000	52
4,020	4,920	9	2,885	2,480 1,428	2	6.	3 2	10	1,110	3,800	54
3,418	4,490	5.5	1,942	1,420	1	9	1	10	1,762	2,833	55
2,875	3, 700	2	2,745	3, 199	1	6	1	7 5.5	1,750	2,632	56
J. 870	4, 280	2 2 2	2,450	1 700	3	5	3.5		1,700	2,788	5.0
3, 36.0 4, 490	4,280	1	2,450	2.870	1.5	4	1.	2	1,762	1,170	6.0
			1,794	2,779			Z	4	1,584		6.1
4,118	7 4,596	4 2	2,580		1	2 4	1	10	1,725	1,901	62
4,000	157	274	1,600	111	.8	1	0 8	1.8	1,833	865	6.6
					111	. 4	.0	ž.	2, 224	2,300	65
2,100	2,400	2	4		***	3	0	3	2,100	15,055 6,900	67
1 7 7			2, 520	1,180	7.7	2.6	0	5.6	1.864	4,270	6.0
6,600			2,432		1.5	2.1	1.9	5.7	1,051	5,196	70
1,992		8	2,220			1		2	1.760	1.960	71
111			3,766		1	4	0	L.	1,404	4,115 1,339	72
			2,712	4, 884	1	8	2	6	1,240	9,276	74
77.74	1114	****		*	*		1	7	11.1.1.	8,534	76
			1,000		1	6		2.5	1,725	8,398	76
		1111	111	1,950	l .	7	0	7	1,880	3,199	7.6
1111		8	2,400	3,420	2,7	4.5 2/4	1	5.5	1,000	6,597	80
3,745	5	8	\$2,880	1	2	6	2	6	1,720	1,717	61
****		+++	2,220	3,680	2 3	8 3	3	6	1,800	4,400	63
1,600		1	900	3,072	2.5	2 4	1.9	2.5	1,616	1,720	85
7.7	1.1		2,512				2		1,5%	7,566	86
3,850	5,100	1 3	3,072	3,192	2	6	1	5	1,680	1, 112	97
3, 900	5, 115		2,200		i''	3.5	1.5	4.5	1,506	2,500	69
4,100	5,089	4 0	2,200	3,144	i	4	i	2	1,789	2,714	901
5,775	6,750	8.9	4.224	4,004	23	22	17	38	1,745	4,517	High Median
1,875	4,920	3	2,441	1,185 1,900	2.5	1	. 2	1	1,165	400 81	Low
60	11	44	56	36 - 10-1/3 mm	66.	89 surea de net i	7I oclude 3 ome	89.		urn half time	

College and University Library

						Lit	rary Ope	rating Es	penditures	
							Books		Other	Total Operating
Library	Enroll-	Book Stock	Volumes Added	Period:	Staff Salaries	Student Service	and Related Materials		Expend:	Eapendi- tures
1, Alabama, Marion Institute.	171	4, 969	188	55	\$ 4, 313		\$ 775	\$ 23		\$ 5,515 8,002
2. Arkanese, Listie Mack** 3. California, Antelope Valley Union H. S. & J. C. 4. California, Citrus*		25,000	651	100	5,545		4,250	700		15, 400
Union H.S. & Z.C.	527	11,063	1,000	100	10.860		2,800	215	556	16,871
4. California, Citrus". 5. California, East Los Angeles	2,196	19,592	2,724	278	11,700	15,664	12,011	146	1,000	41,411
6. Californio, B.I. Comine C.	5, 142	14,686	2,040	156	21,003	2,192	11,125	104	1,279	36, 355
7. California, Breane. 8. California, Hartueli G. 9. California, Los Angeleo Merbur ^{e.}	1, 200	6,000	767 957	123	9,470	225	3,546	308	640	13,989
 California, Hartiseli C. California, Les Angeles Herbur⁴ Calif., Maniu School & College⁽⁴⁾ 	2,169	10,727	1,705	26.1	4,900	1, 295	1,476	412	134	21,854 6,946
10. Calif., Mante Symmet & Cottage				133	6, 100	607	7,460	400	1, 101	15.652
11. Catifornio, Orange Coast C	4,135	52,981	3,094	280	15, 160	966	10,110	1,500	2,850	50, 960
11. California, Riverside C	850	52,981 21,595 40,000	1,003	177	12,550	2,500	4,400 7,350	1, 690	1,350	19,645
14. California, Santa Monica Gity C	7,406	18,522	1,571	222	23, 692	1,092	0,195	1,218	2,302	11, 499
16. California, Vallejo. 17. California, Venture C. 18. Coloredo, Wuman's C. 19. Floredo, Christian C.	626	19,574	959	166	11,676		4,274	530		16, 680
17. California, Venture C	808	17,000	144	25.0	8, 450	275	4,500 3,568	117	450	12,860
18. Colorado, Wuman's C. 19. Fiorida, Christian C. 20. Florida, Palm Beach	181	6,650	45.0	9.0	3, 100	650	1,526	1.6	50	5.340
20. Florids, Palm Seach	240	8,410	80	67	4, 875	+++	716	452		6,140
21. Fineida, St. Petersburg ^{er}	654	12,621	375	86	6,230	914	1,377	150	41	7, 799
Agricultural College 23 Georgia, Armstrang C. 19 24 Georgia, Southwestern C. 25 Maho, Boise	421	7,551	618	174	4, 150 5, 016	1, 1996	2,278	362	253	9.005
24. Georgie, Nouthwestern G.	35.3	11,868	5.14	68	4, 200 7, 600	169	96.7	268	199	5, 10Z 13, 445
25 Maho, Bolze	1.567	16,955								
21, Illimois, Liscoin C.	153	16,000	236	101	1, 100	683	1,324	254	101	4,970 5,320
27, Illinuis, Baringlield's, 28, Iuwa, Eagle Grove P.S. 29, Iuwa, Northwestern 128	164	5,000	634	62	3,450		1,459	20	219	3,424
19 hes Northwestern or	142	9, 154	110	107	3,100	624	1,538	52	1,000	7,440
	84		485	85	4,000	217	650	75		4, 942
11. Kansas, Ursuine C	260	9, 221	75.3	79	3.600		1,035	77	10	4,722
11 Kantucky Largetto ¹⁰	114	4, 981	273	58	1, 000° 2, 560	405	500 567		41	1, 541
14. Kentucky, Sue Bernett C	254	9,198	118	76	2,600	700	925	90		4, 315
16. Massa-Buestle, Lessil	507	13,500	447	118			2,000	125		13, 950*
17. Mich., Henry Ford Community C 18. Michigan, Highland Park	1, 159	9,681	2, 362	158	9,450	4,065	4,500	165		20, 280*
19. Minnesota, Rochester	2.19	9,135	250	84	6,255	590	1,364	186	124	8, 395*
40, Missouri, Cuttey C	53.8	12, 691	615	159	6,650	700	3,453			4.759
45. Missemel, Christian C	201	12,511	140	229	1, 216	1,117 2,879	1,155	129	160	7, 250
42. Missouri, Hannibal-LaGrange C	19	12,926	262	67	1,450	616	2,675	34	154	7,129
47. Missouri, Mannibal LaGrange C. 43. Missouri, St. Paul's C. 44. Missouri, Joylin's 45. Missouri, Southeast Baptist C.	667	10, 292	597	107	1, 118	295 781	3,077	300	492	8,030
		54, 451	1.886	494	16, 160	4, 799	7, 769	1.923	1,790	52, 661
41. Missouri, Stephene C	56	9.941	229	4.3	2,865		6.0	126	439	2,991
68. New Jersey, Centenary "	455 71Z	6,991	976	126	6,912	358	1,807	312	95	8, 815
47. Missouri, Treston 68. New Jersey, Centenary *** 69. New Jersey, Monomouth 50. New York, Casenovia	145	7,096	291	37			1.4.4		+++	
51. North Carolina, Brevard C. **	219	15,640	325	9.1	3,200	1, 321	1,178	158	192	6,249
52. North Carolina, Mars Hill C	124	7,929	1,056	212	2,609	2,617	2,921	54	21	3, 935
54. North Carolina, Pineland C	245	5, 339	676	75	3, 379	201	809	* ***	261	4, 196
55. Barth Carolina, Presbyterian	150	10,892	269	86	1, 100		110	226		8, 199
56. North Carolina, St. Mary's	185	12,819	145	91	5,186-	348	1,617	119	1,022	7,622
58. North Dakuta, State School of Science	868	14, 012	46.1	160	1,180	1.035	2, 350	1117	269	7,565 6,545
59, Oklahoma, Bacone C	180	7,490	557	150	3, 338	1,919	1,033	121	200	6.437
A CHILD BY A CRIST	502	12,800	1,000	130	3, 800	1,440	1,310	90	400	7,060
44 Penn Johnstonn Center Und Pittebur	gh 520	7,000	100	6.9	2,000	500	1,000	100		4,200*
61. Penneylvania, Keystone ***	2.15	12,500	141	51	1,999	183	542	5.0		2.575
61 Chichards, Durthers Unincome 41 Penn, Johnstonn Centre Und Pittabur 61 Penneylvania, Egystone *** 62 Penneylvania, Ogusta Under graduate Conter (Pa. St. Univ.) 65 Taxas, Howard County ***	196	11,000	146 793	85	4,940	040	3,067	201	195	10,014
			2,862	270	7, 677		9,577	1,496	100	16, 367
65. Texas, Lee	1, 731	16, 312	946	162		4-00	9. 176	6.00	100	14, 376
te, Texas, San Angelo C	550	9,423	1,314	110	5, 200	1,200	13, 259	441	719	9, 125
65. Texas, Lee 67. Texas, Kingore C. 68. Texas, San Angele C. 69. Texas, San Antonio 7 79. Texas, Tarleton State C in	742	16, 681	599	354	17, 999	2, 118	20, 118	611	914	25,060
		7, 145	515	126	1,900	553	4,453	248	197	7,565
72. Virginia, Binefield C	556	7,998	793	183	13,519	683	3,805 14,202 5,975*	46.9	551	18,843
71. Toxas, Victoris C. 72. Virginia, Bisefield C./s 73. Washington, Everett 74. Washington, Olympic C. 75. Wisconsin, Concordis C.	1.419	5,825	124	104	13,519 5,075* 4,500	900	5,975*	17.	5, 375	8,975°
		26,450	1,324						14	2,693
Lose Median High	99	4,969 [1,000	979	107	1,900	705	5,260	226 226	360	6,002
High.	7,406	54, 651	1,094	494	36, 160	15,666	40,757	1,921	5, 175	52,641
No.	7.6	75	72	79	79	5.8	8.9	0.0		-

R FOOTHOTES APPEAR AT THE BOTTOM OF THE NEXT PAGE,

Statistics, 1954-55 Junior Colleges *

314113	1100, 170	Ratio of											
Per		Library Espenditures	Total						1 Number Implayees		Working !	wf.	
Student Operating	Total	To Total Institutional	Audin- Vieuel		All N	langradusei	onal	In Full-	Time Equi	valent	Fracal A	Manbar - Dolas	
Expendi-	Institutional Expenditures	Espenditures	Tanada.	Librarian M	finimum	Manimum Manimum	Number	Profes- pronat	Nonpro-	Letai		ante	
\$11.26*	\$ 222, 105 230, 895	2.4	3 31	\$2,250H 6,100H	\$1,700° 1,710°	8	2.	1	1.2	2,2	1,248	973	1 2
9.49			1,500	9,976		2,600	1.	1.5	1.	2.5	1,500	8,400*	1
9,90*	757,687	3,4	1,534	6,000 3,800	3,264	3, 192		2	4	6	1,400*	1,200	
4,80	1,800,548	2.02	100				1	3 8	4	2	1,400**	2, 152	7 8
10.60			174	6,700		3, 120	2	2.4	1.5	1.4		1,070	4
10.08	400,000	5.45		B, 422 ^m 1, 200	1,700	1,020	i	1	i	2	£, 200	1,600	10
14.67	717,179	2.1	2,169	4,785	3,072		2	1	2.7	6.7	1,540	875 787	11
12.21	2, 832, 235	3.17	250	5,345	3,600		1	2	8	3	1,440**	1,400	11
21.73		2.20		***		111	2	3	2	3	1, 26.0	1,119	15
4.52	1,521,047	2.40		6,600	4,645		2		1.5	2. 9	1,440		16 17
24.32				4,200			2	2 2	1.5	2.5		458	18
32,67	349, 875 160, 000	1.6	963	3,100	1,1502			1	411	1	1,440	1,510	20
21.18	84,146	7, 29	+++	5,075				1	977				21
11.74			2.4.4	1,750	- + +	***	1	1	.5	1.5	2,304	2,010	22
16.90	194,480	1.7	176	4,000	1,800	2,500	1	1	1.5	1.5	1.557	1.864	2.5
11,60	120,015	4. 5		4,500			1	I.	110	2.5	1,450	718	24
8.57				4,000							1,000	1,139	26
32.66	149,170			3,400				1	4 4 4	0	1,680		27 28
14.61			3501	3, 450*				1		1	1,326	79.0	19
16.00*	155,794	4,48	228	4,750			***	1		0	1,400"	1,040	30
58.84	94,000	5.26		4,00010				1		1	1, 260		31.
3 M. 26 P	60, 196	7	10	1,000	++1		216	1	ě.	Z	2,000		3.5
30.97	69,828	5.0	1 1 1	2,510				1.		8	1,350	1,000	15
16.98	331, 341	1.3		2,600		+++		2		2		1,600	36
55.6	688,000			111		***	2	. 7	139		1,600	940 273	17
9.60*		***		6,525				2	1.7	3.7	1.650	10	19
51.99	520, 501	3.5		4, 100	1,800		1	i	8	E	1,260,	1,600	40
15.70	180,166	2.55	15	2, 112				1			1,000	1,061	42
28.89	85,000	8.30	15	1, 110			1	.6	1.5	2		960	61
18.25*	140,290	5.5		4,200° m			2	2.		1.5	1,400	5,673	45
18.58	213, 396			2,000			7	9	6.5	15.5	1, 260	7, 998	46
53,00	797, 933	6.4		2,925		200	5	1 2	2.4	4.4	1,260	614	45
12.70	229,091	2.7	191	4,00000	Z, 200 *	1,280	1	1	- 5	5	232		49
12.04	++++						44.1	1	11.4	1			51
28,53		5.5	245	1,500	3,180*		4	1.5	1 6	5.5	1,800	1,866	hz
20.97	345,097	6,60	141	4,800° 3,000			1	1	1	1	1,544		5.5
27.97	57,486 193,314 107,930	2.3	11.7*		1,170		1	1		1	1.586	445	59
				3, 116	1,070		8	1	X	Z	1,638	756	56
29.06*	333,596		139	4,050 88				3	10.0	0	1,269	1,080	5.8
36.36	+ 1	444		3, 100	4 1 1		111	1		8	1,520	2,544	59
17,62	176,247	1,6		3,800		* * *		.1	***	3		1,720	61
11,68	167, 196			1,800				8		1	1,640	500	62
7.99*	153,771	1.7		1,900M				1		5	1,232	244	4.6
	1000	4.71	100	4,000			***	1	***	1	1,860	1,130	45
26.90	213,099	4.11		5,900	+++	2,160*	*	1	2	3	1.920	960	66
7.36	6.88, 742	2.08	111	5, 275		***		1		1	Lin	2, 154	4.8
5.15	256, 157		85	5,867	1,000	2,218	1	- 2	1	1	1.888	1,241	10
33.78	561, 197	5.0	339	5,800			3			1			71
17.26		111	2.00	1,900		500		X.		1	1,469	1,558	7.1
28.72	551, 290	5.09	5 54 1	5,858	2,051		1	2	1 1.5	8.	1,144*	9/0	71
6,320	170,000		650	3,1000.0		2,875	1	1		4			75
	57, 486		15	2,150	1,150	2,000		. 7	.5	-	7 . 175	180	Low
18.16	222, 100	3.8	304	3,900 0,444	1,870	2,875	7	1	6.5	15.		1,158	High Name
52,00	2,832,255	8,3 52	2,169	60	18	19	17	75	17	75	6.5	54	Har
		-											

Books Received

American Literature in Parody: A Collection of Parody, Satire, and Literary Burlesque of American Writers Past and Present. Ed. by Robert P. Falk. New York: Twayne Publishers, 1955, 279p.

Anuario bibliografico puertorriqueno, 1932. Comp. by Gonzalo Velázquez. Río Piedras, P. R.: Editorial Universitaria, 1954. 199p.

A Bibliography on South American Economic Affairs: Articles in Nineteenth-Century Periodicals, Minneapolis: Univ. of Minnesota Press, 1955, 146p.

British Manuscripts Project: A Checklist of the Microfilms Prepared in England and Wales for the American Council of Learned Societies. Comp. by Lester K. Born. Washington, D.C.: The Library of Congress, 1955.

College and University Business Administration. Vol. II. Washington: American Council on Education, 1955. 267p. \$4.50.

Cumulative Index of Hospital Literature, 1950– 1954. Chicago: American Hospital Association, 1955. 513p. \$6.

Duke University Library, 1840-1940. By Joseph Penn Breedlove, Durham, N.C.: Friends of Duke University Library, 1955, 81p. (Library Notes, no. 30, April 1955.)

Georgia, 1800-1900; A Series of Selections from the Georgiana Library of a Private Collector. Adanta: Atlanta Public Library, 1955. (Series 9: The Georgia Novelists.)

Handbuch der Bibliothekswissenschaft. Ed. by Georg Leyh. 3d vol.: Geschichte der Bibliotheken, pt. 12. Wiesbaden: Otto Harrassowitz, 1955.

Hawley's Technical Speller. Comp. by Gessner G. Hawley and Alice Hawley. N.Y.: Reinhold Publishing Corp., 1955. 156p.

Index Translationum: Répertoire international de traductions, No. 6, Paris, UNESCO, 1954, 5680.

Introduction to Asia: A Selective Guide to Background Reading, Comp. by L. King Quan. Washington, D.C.: The Library of Congress, 1955, 214p. Materials in the National Archives Relating to the Middle East. Reference Information Papers, no. 44. Washington: National Archives, 1955, 96p.

Nuestro alfabeto; ensayo de investigación, histórica y linguistica. By María Teresa Chávez Campomanes. Mexico, 1953. 257p.

Periodical Index Manual for Indexers. Prelim. ed. Air University, Maxwell Air Force Base, Alabama.

Preliminary Inventories, the National Archives of the United States. No. 85, "Records of the Extension Service." Comp. by Virgil E. Baugh. Washington, D.C.: National Archives, 1955.

No. 84, "Records of the Select Committee of the House of Representatives to investigate acts of executive agencies beyond the scope of their authority, 1943-1946." Comp. by George P. Petros. Washington, D.C.: National Archives, 1955. 64p.

A Tentative Check-list of Early European Railway Literature, 1831-1848. By Daniel C. Haskell. Boston: Baker Library, Harvard Graduate School of Business Administration, 1955.

Terence Illustrated: An Exhibition in Honor of Karl Ephraim Weston; with an essay by Mary L. Richmond & foreword by S. Lane Faison, Jr. Williamstown, Mass.; Williams College, 1955. 43p.

Twenty-Five Years in the Wide, Wide World! Quarter Century Report of the Class of 1930 of Dartmouth College, Ed. by Francis H. Horn. Brooklyn, N.Y.: The Class, 1955, 279p. \$10.

Walt Whitman's "Leaves of Grass": A Centenary Exhibition from the Lion Whitman Collection and the Berg Collection of The New York Public Library, Comp. by Lewis M. Stark and John D. Gordan, New York: New York Public Library, 1955, 46p. \$1.

World Literature, Volume II: Italian, French, Spanish, German and Russian Literature since 1300. By Buckner B. Trawick. New York: Barnes & Noble, 1955. 373p. \$1.75. (College Outline Series)

Footnotes to Junior College Library Statistics

L Januar cuilege enruliment only. Z Includes supplies, replacements, and new equipment currently needed. I if charged to library budget. 4. Library serves high school and junior cuilege students. 5. Based un total student enruliment, high ethnol and junior cuilege. 6. Housed in department other than library. 7. Not a part of library budget, but housed in library. 8. Out of general families. 8. East, figure on a reported, computed by compiler. 18. Not reported. 11. Rental of audio-visual equipment additional. 12. Estimated equivalent of non-salaried service (Catholic cuileges). 13. Equated to full time (FT full-time students). 4. Plus giff cuilections of 1, 500 unclassed library studies; 15. Plus remon and board for libraryian, and lunches for library stuff. 16. Part of library budget, on figure given. 17. Excusted to full part-time services. 18. Plus remon and board for libraryian, and lunches for library which is the students of the services of the services. 19. Services of the services of

News From the Field

Acquisitions, Gifts, Collections

By the generosity of an alumnus, the Reverend Bruce Swift of Buffalo, the Oberlin College Library is the possessor of a nearly complete collection of material by and about Edwin Arlington Robinson, Beginning some years ago with first editions of the poems, Dr. Swift expanded his interest to include all editions; then, first printings of any writings wherever found, together with bibliographical and critical material about the poet. Only a few unprocurable items are lacking from nearly 200 volumes now assembled. Included are rare first publications. The Torrent and The Night Before and The Children of the Night, as well as a number of letters in Robinson's hand. Most recently acquired is one of the few examples of juvenilia which Robinson was unable to destroy or suppress-a sonnet to Isaac Pitman in the curious booklet Our Phonographic Poets which Charles B. Hogan made the subject of a lively essay in The Colophon in 1938. The original printing of this sonnet, in 1890 just after Robinson had finished high school, was his first appearance in print, save for one poem in his hometown newspaper.

Chancellor Franklin D. Murphy has presented his Edna St. Vincent Millay collection to the University of Kansas Library, through the KU Endowment Association. The collection includes all of the major Millay works in mint condition first editions, with a good representation of the autographed limited editions, and many of the individual items constituting "first appearances." Through Dr. Murphy's genetosity, items are being added to the collection from time to time.

Kansas State Teachers College, Pittsburg, draws attention to two special collections. First is the Haldeman-Julius Collection of material related to the life and publications of Emmanuel Haldeman Julius of Girard, Kansas (only 13 miles from Pittsburg), and of his Little Blue Book and Appeal to Reason Jame. The collection of his life and publications is being enlarged. Second is the Vance Randolph Collection of material by

Vance Randolph, Ozark folklore authority and alumnus of the college.

A Shakespeare First Folio, the first collected edition of the plays of William Shakespeare, dated London, 1623, has been acquired as its two-millionth book by the General Library on the Berkeley campus. University of California. The rare Shakespeare edition comes from the Estate of William H. Crocker. With its collection of two million books, the UG Library is the sixth largest university library in the United States.

Addition of the Folio as the two-millionth book and the opening of the library's new Rare Books Department were marked in special ceremonies October 3. President Robert G. Sproul, Chancellor Clark Kert, Professor James D. Hart, Department of English, and Donald Coney, librarian, discussed various aspects of the place of rare books in the Uni-



The library of the University of California at Berkeley has accessioned a Shakespeare first folio as its two millionth volume. Professor fames D. Hart, Department of English, Kenneth J. Carpenter, head of the library's rare book department, and Donald Coney, university librarian, examine the treasure with obvious pride.

versity. Special exhibitions in honor of the occasion were arranged in 13 of the library's exhibition cases.

The library accessioned its first volume in 1871, three years after the founding of the university. In 1938 the one-millionth volume was added. Since the war the Berkeley campus library has undergone extensive expansion with the completion of a four-story annex in 1950. The library now encompasses 21 branch libraries located on the Berkeley campus; the Bancroft Library with materials relating to California, western America, and colonial Latin America; and the East Asiatic Library of Chinese, Japanese and Korean material.

Accompanying the Crocker presentation of the First Folio are eight other volumes including the first English translation of Cervantes' Don Quixote (1612-1620) by Thomas Shelton, which have been added to the library's Rare Book Room collection.

The Columbia University Libraries report the following significant additions to their collections during the academic year 1954-55:

Clark papers. Professor John M. Clark has presented the professional papers of his father, the late Professor John Bates Clark. These papers, in the field of economic theory, comprise an outstanding acquisition, for Professor Clark's system dominated economic thought during the early decades of this century. His most influential work was The Distribution of Wealth, published in 1899, wherein he sought to establish the laws that control the distribution of income in a static society.

Fifty Books of the Year. The American Institute of Graphic Arts continued its project of placing at Columbia a complete collection of the annual "Fifty Books" awards. Recently the 1953 show completed its tour of the country, and accordingly it was added to the selections of the 30 previous years now on the shelves of Special Collections. Columbia now has the complete file, 1923 to 1953.

Chinese dynastic history. In recognition of Columbia's 200th anniversary, the Columbia Alumni Association in Taiwan subscribed to the purchase of the Pai na pên Ērh shih ssū shih, a reprint of 24 dynastic histories of China, edited by Chang Yuan-chi and pub-

lished in a photolithograph edition in Shanghai in 1937. The period covered dates from the earliest times through 1643. Each dynastic history was usually compiled by a commission working under the auspices of the succeeding dynasty. Contents include, in addition to imperial records, the state of numerous disciplines of knowledge, biographies of personages deemed eminent in the eyes of the government, and commentaries on foreign nations. As might be expected, texts sometimes suffered later alteration for political or personal expediency. The Pai na edition is the result of a painstaking and scholarly collation of extant texts (some date back to the Sung dynasty of 960-1279) considered to be authentic. The set was presented in a book cabinet upon the doors of which are inscribed the title of its contents and the occasion of the gift.

Horeh gift. Mr. Howard Linton, librarian of the East Asiatic Library, reports that Mr. and Mrs. Louis L. Horeh have presented a nearly complete edition of the two most monumental works in Tibetan literature: the Kanjur in 102 volumes containing the Buddhist scriptures; and the Tanjur in 224 volumes containing commentaries on the scriptures and, in addition, independent works on logic, grammar, history, medicine, and a variety of other subjects.

The books, which were printed from carved wood blocks, were acquired from a monastery in Tibet and brought out of the country by caravan by Nicholas Roerich, leader of an expedition into Central Asia during the years 1925-1928. An average "volume" consists of about 475 sheets, printed on both sides, tied together between decorated wooden boards, and wrapped in cloth (red for the Kanjur, yellow for the first part of the Tanjur). Each volume measures about 7½ by 30 by 5 to 6 inches. Someone once estimated that an average bundle of this kind weighs ten pounds and that it requires a dozen yaks to transport the Kanjur alone.

Preliminary examination of the works indicates that they are of the Narthang edition. Kenneth Ch'en of Harvard, in an article on "The Tibetan Tripitaka" in the Harvard Journal of Asiatic Studies, June, 1946, states from a Japanese source that "the decree to print the Narthang edition was given by the 7th Dalai Lama in 1727. The actual cutting of the blocks required the services of 800 men, and the work consumed one year and six months." The date of the printing of the Roerich copy has not yet been determined. A wooden case, especially constructed with ample "slots" for individual shelving of the volumes, was included in this important gift.

Santayana collection. Through the generosity of an anonymous donor, Columbia University recently acquired a magnificent collection of the original manuscripts, annotated copies of books, and memorabilia of the late George Santayana. In addition, two groups of Santayana letters have also come

to Columbia recently.

Eliot's Indian Bible. One of the most important and interesting books in the annals of American printing was recently presented to the Columbia Libraries by Mrs. Seth Low Pierrepont, née Nathalie Elisabeth Chauncey. It is the Bible in the language of the Massachusetts Bay Indians, known as the "Fliot Indian Bible" because it was planned and carried to completion by the Reverend John Eliot as a means of Christianizing the New England natives. The Algonkin Indians, of course, had no written language of their own adequate to express the nuances of the Bible text, so this is a phonetic rendering, a transliteration using our alphabet to form Indian words. The New Testament was completed first, in 1661, and the Old Testament followed in 1663. Mrs. Pierrepont's copy, still in its original binding, is an exemplar of the first complete edition. The book is one of the monuments of the early colonial press, having been printed in Cambridge by Samuel Green and Marmaduke Johnson barely a quarter of a century after the establishment of printing in what is now the United States.

Marco Polo. A member of the Class of 1916 has presented funds for the purchase of the first printed edition (Nuremberg: F. Creusener, 1477) of the account of Marco Polo's travels. The book is of the greatest rarity; only eleven copies are recorded, and Columbia's copy is one of only three known to be in America. Of paramount interest is the woodcut frontispiece portrait of Marco Polo, which has been colored by hand, probably at or near the time of publication. The volume is from the library of the Earl of Craw-

ford and is in superlative condition, having been bound in fine green levant morocco in 1852 by the Paris binder, Duru.

A "grangerized" copy of a Charles Dickens biography—with appropriate manuscripts and engravings bound in with the text—is the nucleus of a valuable Dickens collection which has been given to the Cornell University Library by William G. Mennen, president of the Mennen Company, Morristown, N.J., and a Cornell graduate of the class of 1908.

"Grangerizing" comes from James Granger, who in 1769 published a *Biographical* History of England with blank pages for additions.

The biography is a three-volume first edition of the Life of Charles Dickens by the novelist's friend. John Forster. Someone, probably a Dickens admirer named Edward J. Collings, expanded the set to six volumes by adding 440 engravings of persons and scenes mentioned in the book and 235 autograph letters.

These letters are regarded as especially valuable to scholars, for among them are ones by Carlyle, Gladstone, Hawthorne, Longfellow, Thackeray and Dickens himself.

A pamphlet by Lauriat Lane, Jr. of the Cornell English faculty, describing the grangerized Life of Charles Dickens, has been published by the Cornell Library Associates.

Among other rarities in the Mennen collection are first editions of Dickens' novels and of works he edited, autographs, letters, and other documents.

Mr. Mennen's previous gifts to the university library include a set of the four Shakespeare folios and the first two English editions of Montaigne's Essays, published in 1603 and 1613 in folio volumes.

BUILDINGS

Augustana College, Sioux Falls, S.D., dedicated its new Mikkelsen Library on September 15. This was one of the library buildings studied at the ACRL Buildings Institute in Detroit.

The library campaign goal of \$450,000 at Evansville College, Evansville, Ind. was oversubscribed, and this, together with a \$200,000 gift from the Lilly Endowment.

presages occupancy, it is hoped, some time in the fall of 1956. The new building is to be named the Clifford Memorial Library in honor of Mr. and Mrs. George S. Clifford, both of whom had an outstanding part in the establishment and development of Evansville College

MISCELLANEOUS

Southern State College, Magnolia, Ark., formerly a junior college, was accredited by North Central Association as a four-year degree-granting college in March 1955. Its library was listed as one of the elements of strength of the college, especially "as to building, staff, expenditures for books, and

provisions for student use."

The story of the notable "Banned Books" exhibit arranged last spring by the University of Kansas library is being told over the world with sponsorship by the Fund for the Republic, a Ford Foundation-supported agency. A grant from the Fund for the Republic has provided for the reprinting and distribution of 15,000 copies of the catalog for the exhibit. The exhibit of banned, burned and expurgated publications dating from 1532 attracted wide attention during its display in Watson library. The catalog, compiled by Joseph Rubinstein and Earl Farley, lists more than 135 incidents of suppression and names more than 120 authors, 31 of them Americans, whose works have been censored or destroyed.

The Fund for the Republic is active in the field of freedom of speech. The catalog of the K.U. exhibit was chosen to illustrate rensorship as a problem alive and crucial in our own day, in our own country. The reprints are distributed through the university library's exchange facilities, which will put them in 3,000 libraries abroad.

The University of Kentucky Library has

received a \$20,000 grant from the Governor's emergency fund. The money will be used to establish a newspaper microfilming laboratory, then to inaugurate a program for microfilming all current Kentucky newspapers and back files of Kentucky newspapers in danger of disintegration. The project resulted from several years of cooperative study by the Kentucky Press Association and the university library.

The Lost Cause Press proposes to reproduce on microcards certain important American books of the nineteenth century that are not readily available in the original or in good modern reprints. Major emphasis will be on literary works but related materials significant in the history of nineteenth-century American culture will be included. The project will be carried out by regions, beginning with the Ohio Valley. Eighty-eight titles are listed in "Nineteenth Century American Literature on Microcards; Series A: The Ohio Valley." Prepublication price (prior to January 1, 1956) was \$98. The same press announces also the "Kentucky Culture Series," microcard reproductions of important source materials relating to the culture of Kentucky and the Ohio Valley. The first ten titles are available for \$14.04, a substantial saving over the individual prices. The Lost Cause Press is under the direction of Charles and Nancy Farnsley at 2116 Confederate Place, Louisville 8. Kv.

Two new volumes of the "Emory Sources and Reprints" have been issued by Emory University. These publications are edited by faculty scholars based on source material in the library. The new titles are: Sporting Sketches from The Countryman, by George L. F. Birdsong, 1863-61, and Inaugural Address of Augustus B. Longstreet, Emory College, 1840. Details about prices and other titles in the series published three times a year are available from Mrs. E. T. Martin, Emory University, Ga.

Personnel

KENNETH M. SETTON, who returns to the University of Pennsylvania as director of libraries, is a well-known medieval scholar.



KINNETH M. SETTON

He was born in New Bedford in 1914 and received his A.B. from Boston University, did graduate work at Chicago and Harvard, and received the doctorate from Columbia. He has been an instructor of classics and history at Boston University: associate professor of Europe-

an history at the University of Manitoba and chairman of the department there; and Henry C. Lea Associate Professor of Medieval History and Curator of the Lea Library at the University of Pennsylvania. He has taught also at Bryn Mawr. During the past year he was professor of history at Columbia, from which post he goes back to Pennsylvania. Professor Setton is the author of several books, including his study of Catalonian expansion in the Eastern Mediterranean, and a number of notable articles and papers on Byzantine history. He is a member of the advisory board of Speculum and has considerable editorial experience as editor in-chief of the Pennsylvania History of the Crusades, now in process of publication by the University of Pennsylvania and the Medieval Academy of America.

Mr. Setton is an experienced librarian through his connection with the Lea Library. He is a bibliophile of many years' standing.

Mr. Setton has delivered numerous papers at meetings of learned societies. These papers combine precision and detail with breadth of understanding, and, what is even more unusual at a learned society, humor. He is one of the rarest of persons, the human humanist.—Barnaby C. Keeney.

FLORA FLIZABETH REVNOLDS has been named to succeed Dr. Evelyn Steel Little as head librarian of Mills College. Recipient of A.B. and M.A. degrees from the University of California at Berkeley, the new Mills librarian was awarded her certificate of librarianship at California in 1956. As an undergraduate she was elected to Phi Beta Kappa.

Miss Reynolds served four years (1939-45) as head li-



FLORA F. REVNOLDS

brarian of the Mill Valley Public Library. Her other past affiliations have included positions with the Sausalito and Berkeley Public Libraries. As librarian for the U. S. Army from 1945 to 1945 she supervised the organization of a library at Camp McQuade and operated libraries at the San Francisco Presidio, Camp Beale and Fort Ord. She also acted as reference librarian at San Francisco State College for three years (1950-53). During 1953 and 1954 she was connected with the University of California Extension Division staff as instructor in reference and bibliography. She is president-elect of the East Bay Reference Librarians' Council.

DONALD THOMPSON, formerly librarian of the Mississippi State College, became head librarian of Wabash College, Crawfordsville, Indiana, in September 1955. During his tenure at Mississippi State Mr. Thompson was president of the Mississippi Library Association in 1949-51, a member of the Board of Directors of the Southeastern Library Association in 1950-54, chairman of PASS in 1953-54, state representative of ACRL in Mississippi for three years, and a member of several committees in ACRL, SELA, and the Mississippi Library Association. He has edited a bibliography of the Mississippi State College theses through 1952 and two volumes of thesis abstracts. Mr. Thompson brings to Crawfordsville the same type of cultural interests that have made this famous old community outstanding in the arts and literature of the Middle West. He has notions about making the library a vital force in the teaching program which will coincide closely with the progressive ideas of President Frank Sparks and the noteworthy corps of undergraduate teachers that he has brought together in Crawfordsville.

LEIGH D. JORDAHL has been appointed librarian at St. Olaf College, Northfield, Minn. Mr. Jordahl has for over two years been catalog librarian at Carleton College in the same town. A 1945 graduate of Luther College at Decorah, Iowa, and of Norwegian parentage, he is a singularly apt choice for this position. During his work at Carleton, Mr. Jordahl has made a real contribution, first in his reorganization of the book collection, and in his participation in other faculty activities. Moreover he has pursued his postgraduate interests in history, Scandinavian literature and education at the University of Minnesota, where he has earned the M.S. degree in library science. He has had additional study at Bethany Lutheran seminary in Mankato.

Mr. Jordahl has become well acquainted on the St. Olaf campus in his two years in Northfield. His friendly manner and intellectual interests coupled with a genuine professional outlook and ability give promise for a highly successful future in his new location.

— James H. Richards, Jr.

MARINA T. BOAZ has been appointed director of the School of Library Science at the University of Southern California. She will also serve as associate professor.

Dr. Boaz has been assistant professor in the USC school since June, 1953. She will take over the directorship formerly held by Dr. Lewis F. Stieg, who has also been university librarian since 1947. The latter will now devote full time to the expansion and development of the university's library program. He recently returned from a year's special leave of absence to set up a library program in the Philippines.

Dr. Boaz earned her B.S. degree from Madison College, Harrisonburg, Va., in 1932, and her B.S. in Library Science from George Peabody College, Nashville, Tenn. Her Ph.D. and M.A. degrees were granted by the University of Michigan. She has taught in Madison College and the universities of Tennessee and Michigan. Prior to coming to Southern California she was a first assistant in the Pasadena Public Library. She is co-author of a number of books in her field and has contributed to national magazines in library science.

IRVING LIEBERMAN has been appointed director of the University of Washington School of Librarianship. The appointment will become effective February 1. He will succeed Gladys Boughton, who resigned last spring to devote full time to research overseas. Dr. Lieberman did his undergraduate work at New York University and his professional and graduate work at Columbia University (M.A. and Ed.D., Teachers College, and B.S., School of Library Service). He has had experience in various types of libraries, and during World War II was a major and library officer in the European Theatre of Operations. During 1952-54 Dr. Lieberman was research associate in charge of the audiovisual project at the School of Librarianship, University of California. Since 1954 he has been an associate in library service at Columbia University.

RICE ESTES has been appointed librarian and associate professor of library science at Pratt Institute. He will act as dean of the library school during the current year. Mr. Estes has an A.B. from the University of South Carolina, an A.M. from the University of Southern California, and a library degree from Pratt. He has had a wide variety of library experience over the last 25 years, chiefly in academic libraries. Most recently he has been an associate librarian at George Washington University.

Dr. Rudolf K. Engelbarts was appointed head of the Catalog Department, University Library, University of California at Los Angeles in July, 1955. He is a graduate of the University of California School of Librarianship. Prior to his entrance into the library field he was an instructor at the University of California, Berkeley, where he received his doctorate in Germanic languages. He joined the Catalog Department at U.C.L.A. Library in 1941 and was appointed assistant head of the department in 1952.

The Kansas State Teachers College of Emporia has announced the appointment of Dr. Ralph A. Friz as a lecturer in the Department of Library Science and of Dr. Rolland A. Alfreman to the staff as director of audiovisual services and professor of education and library science. Dr. Fritz assumed his responsibilities on June 1 at the beginning of the 1955 summer session and Dr. Alterman assumed his duties on September 1.

ELLES R. CARPINO has been appointed assistant librarian of Wheeling College, Wheeling, W. Va., which opened its doors for the first time on September 12, 1955. Miss Carpino will assist Miss Josephine Savaro, formerly a member of the library science faculty at the Catholic University of America. The new college library was occupied on August 15, at which time 10,000 volumes which had been cataloged and prepared during the preceding year were on the shelves.

DONALD T. SMITH, former assistant librarian at Clarkson College of Technology in Potsdam, N.Y., has been appointed librarian at Wagner College, Staten Island, N.Y. Mr. Smith received his B.A., and M.A. from Wesleyan University and his master of library science degree from Columbia University. Following his graduation from Columbia he served for two years as acting reference librarian at Colby College in Maine before going to Clarkson.

Appointments

WILMER H. BAATZ, formerly chief of the Processing Department of the Milwaukee Public Library, has been appointed supervisory librarian of the Veterans Administration, Central Office, Washington, D.C.

J. Terry Bender is the new chief of Stanford University Libraries' Division of Special Collections. A member of the division since 1953, Mr. Bender succeeds Jeannette M. Hitchcock whose retirement was announced in September.

JOHN V. BORDEN, formerly librarian of North Dakota State Normal and Industrial College at Ellendale, has been appointed circulation librarian at Idaho State College, Pocatello.

Aristotle Bouras has been appointed to the technical processes staff in Fresno State College Library.

REV. ANDREW L. BOUWHUIS, formerly librarian of the Canisius College Library, has been appointed director of the George Johnson Library at St. Peter's College in Jersey City.

JOHN R. CLIFFORD has been appointed head of the Social Science Library of Southern Illinois University.

ALAN M. CORN has been appointed head of the Humanities Library of Southern Illinois University.

Mrs. Trupie Coppington Davis has been

appointed librarian of Mary Baldwin College, Staunton, Va.

ARNOLD D. EHLERT, formerly librarian of the Fuller Theological Seminary, Pasadena, Calif., has been appointed librarian of the Bible Institute of Los Angeles.

JOHN R. TURNER ETILINGER has been appointed to take charge of special collections at Brown University Library.

EVAN I. FARBER, formerly at State Teachers College, Livingston, Ala., has been appointed head of the Serials and Binding Department of the Emory University Library.

ELLIOTT HARDAWAY, formerly associate director of libraries at Louisiana State University, was appointed assistant director of the University of Florida Libraries on July 1, 1955.

REV. W. CHARLES HEISER has been appointed librarian of St. Mary's College, St. Mary's, Kan.

DAVID HERON, formerly librarian of the Graduate Reading Room of the University of California at Los Angeles, has been appointed assistant to the director of the Stanford University Libraries for a two-year period beginning September 1, 1955.

MARGUERITE S. KAUFMAN, formerly assistant art and architecture librarian of the University of Illinois, has been appointed librarian of Elmhurst College, Elmhurst, Ill. FRENERICS E. KINDER has been appointed amistant librarian of the Polytechnic Institute in San Germán, P.R.

WARREN B. KUHN, formerly circulation librarian of the University of New Mexico Library, has been appointed assistant librarian at the Matthews Library. Arizona State Col-

lege, Tempe.

EDWARD P. LEAVITT has been appointed principal documents librarian of the Stanford University Libraries. Mr. Leavitt was previously reference librarian at Boston College and succeeds Mrs. Irma Goldner, who has become assistant librarian of the Stanford Law Library.

Lois Lindberg was appointed catalog librarian of Carleton College on October 1.

DOROTHY ALMA MARTIN has been appointed librarian of the College Laboratory School, Fresno State College Library.

Dr. JULIAN GERARD MICHEL has been appointed head of technical processes. Fresno State College Library.

PAUL L. RICHARDS has been appointed circulation chief at Brown University Library and also assistant professor of bibliography.

HORTENSE F. RICHARDSON has been appointed assistant in the Arthur M. Allen

Reading Room in Brown University Library.

EDVIN MAR SCHMIDT has been appointed reference librarian of the Friends Univer-

sity, Wichita, Kan.

GWENDOLYN SCHULIZ, formerly documents librarian of the Colorado State Library, has been appointed loan librarian at Occidental College in Los Angeles.

ROSE MARIE SERVICE became reference librarian of Carleton College on September

1, 1955.

HERBERT M. SEWELL, formerly librarian of the Toledo Public Library, has been appointed associate professor in the University of Wisconsin Library School.

HARRY R. SKALLERUP, formerly physics librarian of the University of Illinois, has been appointed head of the Science Library

of Southern Illinois University.

Mrs. Marion M. Smrrii is the new chief circulation librarian of the Stanford University Libraries. Mrs. Smith joined the Stanford staff in October, 1953, as acting director of the library of the Graduate School of Business.

RUSSELL TRUDELL, formerly documents librarian, Miami (Florida) Public Library, is head, Serials-Order Department, Rensselaer Polytechnic Institute, Troy, N.Y.

Retirements

DR. EVELYN STREE LITTLE retired last August as librarian and professor of comparative literature at Mills College, positions she has held since 1936. In addition to her teaching and library administration duties she acted as dean of faculty from 1945 to 1951.

Prior to joining the Mills faculty Dr. Little taught at the University of California, University of Michigan and Emory University. She was president of the California Library Association in 1946-47. She was graduated from the University of California at Berkeley and received her doctorate in comparative literature and bachelor's and master's degrees in library science from the University of Michigan. She is a former librarian of Oakland Technical High School.

While on leave from Mills during 1943 and 1944, Dr. Little served as assistant director of the American Library at the U. S. Embassy in London, where she directed the staff and organized material for the Information Library under the British Division of the Office of War Information.

Mrs. Elisabeth L. Gordon, for 25 years on the staff of the University of Pennsylvania Library, has retired as head of the Acquisitions Department.

JEANNETTE M. HITCHCOCK retired on October 31 as chief of the Division of Special Collections and keeper of rare books of the Stanford University Libraries. A member of the Stanford staff since 1923, she has headed the libraries' special collections since their establishment.

ALICE M. HUMISTON, head of the Catalog Department, University of California Library at Los Angeles, retired June 30, 1955 after 30 years of service. A graduate of Simmons College Library School, Boston, she came to the U.C.L.A. Library in 1925 from the position of head cataloger at Minnesota Historical Society. She was appointed head of the Catalog Department at U.C.L.A. Library in 1945.

HELES M. McFarland retired from the librarianship of the Kansas State Historical Society on June 1, 1955, after having served there since 1925.

Wharton Miller, director of the Syracuse University Library and dean of the library school since 1927 retired in June, 1955. Mrs. Miller, a professor in the library school, also tetired.

CHARLES V. PARK retired from the librari-

anship of Central Michigan College, Mount Pleasant, on July J. 1955.

LOUISE WHELER, head of the Reference Department of the University of California Library at Davis, retired on September I after 25 years of service. Miss Wheeler, who had a large share in the effective development of the University Library at Davis, has degrees in chemistry and library science from the University of Minnesota and the University of California, respectively. She also had experience at the Santa Clara County Free Library, the Nevada State Historical Society, and the Oregon State College Library.

Foreign Libraries

NORBERT FISCHER has been appointed director of the German Patent Office Library in Munich.

ARTHUR ALLAN GOMME, librarian of the British Patent Office Library from 1919 to 1944, died on February 10, 1955, at the age of 72.

ARNE 1. MOLLER, chief librarian of Dan-

marks Tekniske Bibliotek in Copenhagen, died on June 27, 1955. Mr. Møller had been president of the International Federation for Documentation since 1951.

JULIUS FRANZ SCHÜTZ retired from the directorship of the University of Graz Library on December 31, 1954, and KARL FRIEDL has been appointed as his successor.

Necrology

Henry Everyn Berss, author of A Bibliographic Classification and other works on library classification published by the H. W. Wilson Company, died on August 9, 1955, after a slight illness at his home in Plainfield, N.J. One of America's foremost contributors to the systemizing of bibliographic classification, he was 85 years old.

Mr. Bliss, who retired in 1940 as associate librarian of the College of the City of New York, had been associated with that institution since 1891. The bibliographic organization of knowledge, a study to which be devoted more than 50 years, first engaged his attention about 1900 when he found that the classification system used by the City College library was inadequate for classifying the rapidly developing fields of science, social science, technology, literature, and other subjects.

His new classification system—by which

the City College library was reorganized in 1905-1908—endeavored to systematize all branches of knowledge and study in accordance with the consensus of modern scientific and educational thought. He reasoned that the reader and the researcher are best served by a classification which places in proximity the subject matters that are most likely to be wanted together (the principle he called "collocation for maximal efficiency"); which groups smaller, related subjects under the relevant, more general subjects ("subordination"); and which provides for revision according to changes or new developments in various subject matters ("adaptability").

His introductory volume, The Organization of Knowledge and the System of the Sciences (introduced by John Dewey in 1929 as a "monumental work" and an important contribution to the unification of knowledge), was followed by The Organization of Knowledge in Libraries and the Subject-Approach to Books (1933) and A Bibliographic Classification (a four-volume work completed early in 1953). Although the Bliss classification has been adopted by only a few libraries in the United States, it has influenced American thinking on classification. It also enjoys a considerable reputation in Britain and the British Commonwealth nations, where it is in use in about 60 libraries.

In the last years of his life, in addition to other activities, Mr. Bliss planned (and edited the first three numbers of) the Bliss Classification Bulletin, an occasional mimeographed publication designed to keep his system of classification up to date. He was a member of the Special Libraries Association, Library Association of the United Kingdom, and the (British) Poetry Society. His writings include a book of poems, Better Late than Never, published by G. P. Putnam's Sons, in 1937.

HENRY MARTYN FULLER died suddenly in September, 1955, of bulbar poliomyelitis. At the time of his death, Mr. Fuller was head of



HENRY M. FULLER

the Reference Department and research associate at the Yale University Library in New Haven. He received his B.A. degree in 1935, his M.A. in 1947, both from Yale, and an M.S. in Library Service from Columbia University in 1950. He joined the Yale library staff in 1937 after teaching for two years in a private

school. He taught one summer at Teachers

Mr. Fuller was very active in professional groups in his own library and at the time of his death he was chairman of the Wilson Committee on the International Index. He had also been Chairman of the ACRL Committee on Inter-Library Loans.

Among his published works are a review of "Use of the Subject Catalogue in the University of California Library," Library Journal 76:1513; "Let's Look at the Catalogue," Ibid. 76:1992.9; "Bishop Berkeley As a Benefactor of Yale," Vale University Library Gazette 28:1-18: "International Index under Study by Librarians," Serial Slants 5:82-8 (also in Wilson Library Bulletin 29:66-76).

Mr. Fuller seemed an ideal reference librarian with his combination of scholarship and library technique. If any criticism could be found it would be that he gave too much help. The Yale faculty and undergraduate body are going to miss him almost as much as his library colleagues.—Donald G. Wing.

OTTO CHOMET, cataloger at the Brooklyn Public Library, died suddenly on August 14, 1955. Mr. Chomet had been cataloger at Antioch College, Yellow Springs, Ohio, from 1944 to 1949 when he joined the Brooklyn staff. Mr. Chomet was born in Vienna and came to this country in 1939. He was graduated from the University of Minnesota, Division of Library Instruction, A specialist in German, Yiddish and Hebrew cataloging, Mr. Chomet had translated and published several articles of both general and library interest. His last article appears in the September issue of the Wilson Library Bulletin. Mr. Chomet was a member of the ALA, SLA and the New York Library Club.

HERBERT S. HIBSHBERG died on September 15, 1955. Mr. Hirshberg served from 1929 to 1943 as dean of the School of Library Science of Western Reserve University. He continued with the university until 1945 as director of its libraries. Since then Mr. Hirshberg had been an editorial adviser of the Encyclopedia Americana and a contributor of articles on library themes.

During Mr. Hirshberg's career he was a cataloger at the Boston Public Library, an assistant librarian at the New York State Library in Albany, an assistant in the music division of the Library of Congress, and assistant and branch librarian at the Carnegie Library in Pittsburgh.

He wrote Subject Guide to Reference Books and, in collaboration, Subject Guide to United States Government Publications.

BERTINE E. WESTON, associated with the Library Journal as managing editor from 1929 to 1933 and as editor from 1933 to 1943, died on August 10, 1955.

Review Articles

Information Processing Equipment

Information Processing Equipment. Edited by M. P. Doss. New York: Reinhold, 1955. 270p. 88.75.

This collection of the papers of a symposium held in 1953 includes ten papers. The first is "Special typing, stenciling, hectographing, figure preparation and miscellaneous equipment": the second, "Lensless copying with sensitized papers": the third, "Photography in the laboratory": the fourth, "Microcopying . .": the fifth, "Xerography": sixth, "Letterpress and offset printing": seventh, "Author's guide to effective slides": eighth. "Audio methods for handling data": ninth, "Storing and finding technical information with punched cards": and finally "Numerical data-handling machines."

This miscellany not only duplicates information in other sources but also duplicates within itself—i.e., Stenafax is illustrated and described on pages 11-12, where it may belong, and then is re-illustrated and redescribed briefly on pages 47-49, under "lensless copying with sensitized paper," where it

does not belong.

New processes, such as Kalfax, are not covered since the basic material on which this "book" was based was all delivered two

years ago.

The range of topics, presented with only the most general data on when or where each is suitable economically, runs from reading glasses for two or three diameter enlargement, to typing, to photomicrography, high speed moving picture cameras, slide projection equipment, audio recording devices, etc.

The treatment is uneven. In some of the articles a great deal of technical information is assumed. In others, the difference between 16, 35, and 70 mm. film is described and illustrated. Some of the material, such as that on office dictating machines and movie sound-tracks, is simply dragged in, as are slide

rules and conventional office-type adding machines and calculators.

The collection of papers is profusely illustrated, and a large percentage of the illustrations seem quite unnecessary—among these, illustrations that appear to add so little to what is so commonly available as to be a waste of space would be: the IBM electric standard typewriter, the Varityper, a publicity picture showing three desks with machines on them and labeled "a battery of three automatic typewriters . . . ," a Dick stencil duplicator, a Photostat camera, seven conventional microfilm cameras and reading machines, x-number of pictures of notched or punched cards, etc., etc.

Some of the illustrations are definitely misleading. One shows a man standing next to a pile of books almost up to the top of his head and holding a box of microfilm. The impression it gives is that the small roll of microfilm (weighing 1.5 ounces) takes the place of all this. The caption is "Microfilm for condensation. . ." But it goes on to say that this film was made for a student . . and includes all the pertinent material found in the 366 pounds of volumes (italies supplied). If the pertinent material does not equal the total, and it cannot, then what honest pur-

pose can the illustration serve?

This symposium volume does not add up to a coherent, seminal contribution to knowledge, and the price of \$8.75 for its 270 padded pages is far out of line with the material that might be derived from it that is not readily available elsewhere.—Ralph R. Shaw, Graduate School of Library Service, Rutgers University.

Technical Reports

The Technical Report; Its Preparation, Processing, and Use in Industry and Government, Edited by B. H. Weil. New York: Reinhold, 1954, 485p. \$12.

This book makes an important contribution to a critical area in the documentation of research. Its scope is clearly indicated by the title and in general its promise is borne out by the text.

The 24 chapters and two appendices are grouped under five general headings. Part 1 is devoted to the functions of the technical report in industry and government. Part 2 deals with preparing and processing the reports and covers details of writing, illustrating, editing and duplicating. Part 3 is on distribution, Part 4 on filing, and Part 5 on use. Every aspect of the technical report is treated, from writing to reading.

There are two general areas in which this collection of papers can be criticized. The first is the manner of address. The audience is for the most part the amateur in each of the many aspects of writing, duplicating and handling of reports. In a few instances this results in such inanities as "Grammar is a subject that cannot be avoided in report writing" and "No filing system needs to be completely original." With respect to the first example, in particular, some compromise might have been safely made with the objective of comprehensiveness by omitting some of the lessons in sophomore English composition. Several books and many articles on technical writing are already available, as witness the bibliography of 71 items on pages 59-62

The preoccupation of the book with the mechanics of preparing and handling technical reports may explain the second area of deficiency as viewed by this reader, namely the function or role of the technical report in the broad field of documentation of research and development. What is its relative importance in the whole field of scientific and technical literature? Is it primarily a necessary instrument of the research team in industry or government? Is its origin and continuance due primarily to security classification of information, both private and public? Or is it a handy device for applying the "need to know" philosophy of distribution? Perhaps this book is not the appropriate place for discussion of such questions.

Despite these general weaknesses, the work will be welcomed by many. In a book which is a composite of the writing of 23 different authors one does not expect uniformity in content, emphasis or quality of writing. Directed at every person—from typist to executive—who has anything to do with technical

reports, this collection of papers achieves a surprisingly even quality, due no doubt to the work of the editor. It should be an invaluable aid, especially to those individuals in company and government departments who have a wide range of responsibility for technical reports.

Among a number of very useful chapters, three might be mentioned by way of specific examples. "Illustrating, Duplicating, and Binding the Technical Report," by B. A. Jones, is packed with information and might well be expanded into a book. "Cataloging Government Technical Reports," by Bernard Fry, is a compact discussion of points particularly relevant to the subject. And "How to Locate and Obtain Government Information Reports," by Patricia Brown, would be a happy contribution to the volume if it consisted only of the table on "Document-Issuing Government Agencies." The subjects of many other chapters are treated with equal effectiveness.-Herman H. Henkle, John Crerar Library.

Naval Academy Library Classification

Classification Schedules BB-BK: Aeronautical Art and Science, U. S. Naval Academy Library. Compiled by James M. Saunders. [Annapolis, 1954, 88p.]

In evaluating any classification scheme, one must take into consideration several items of prime importance. These are: Was the scheme developed for a particular library and, if so, is it easily adaptable to other libraries' needs? Is it a practical scheme? That is, is it expandable? Can new developments be placed logically and simply within the framework? Is it easily understood and usable by persons without special training or experience in the subject field?

To all of these questions, the answer concerning this classification is, yes. This scheme, developed by James M. Saunders, is primarily a classification scheme to which letter and numeral notations have been added. There is, for this reason, no evidence of forcing to obtain mnemonic notations or to arrange for systematic evenness in the expansions. Primarily, this classification of "Aeronautical Art and Science" was prepared for one purpose: providing a satisfactory scheme for a particular library—that of the United States Naval Academy. The fact that it is a good scheme adaptable to the needs of other libraries is a gain in this phase of professional tools.

Mr. Saunders has divided his scheme into four general parts: (1) BB and BC-general, (2) BD and BE-engineering, design and powering, (3) BF and BG-commercial and industrial, and (4) BH, BJ, and BK-military. General works, works on aeronautical education and schools, works on airmanship, flight technique, air navigation and civil aviation law are classified in the general section. In the second section are aeronautical engineering, aerodynamics (applied), aircraft and airport design and construction, power plants, auxiliary machinery and fuels, and general flight propulsion. In section three, commercial and industrial aeronautics, manufacture and trade, airline and airport operation and management and materials on airways in general are found. Section four covers the air forces of the world and their organization, materiel, bases, administration, personnel, supplies, and communications. With this section are classified also works on air warfare, strategy and tactics, weapons, and topics on gunnery.

As will be immediately noticed by those familiar with the two major schemes, Dewey and the Library of Congress, this bringing together of all material in the field of aeronautics is different from both those classification systems. In the Library of Congress system general aeronautics is classed in TL. 500 to 830 in the general section devoted to "Motor Vehicles, Cycles and Aeronautics"; military aeronautics is classed in the military engineering section UG 630 to 635 and naval aviation is in the VG section devoted to "Minor Services of Navies." In Dewey general aeronautics is found in the section devoted to "Other Branches of Engineering," while military aeronautics is squeezed in with "Military Signalling." Material on air forces of the world is in 358.4, while books on aerial warfare must be divided to class with the emphasized topic in aeronautics or with the history of the war to which it pertains.

For the library of the United States Naval

Academy, or for any library where emphasis must be placed on special technologies, grouping them together rather than spreading them widely as applications to other technologies. Mr. Saunders' classification fills a gap of long standing. For other libraries, careful examination of this scheme will result in a better understanding of one of the fields of technology that has expanded and is expanding far beyond the imaginations of the compilers of Dewey and Library of Con-

From the point of view of practicality an index to this classification scheme would have made it easier to use, but in his preface the compiler states that by making use of the outlines an index is unnecessary. This is true in a limited sense. However, to make use of the outlines and the classification scheme without an index requires a thorough knowledge of the scheme and experience in its application. To assist the user, there have been inserted numerous cross-references and directions to compare other sections before final classification of the material being handled is determined.

In his assignment of notations Mr. Saunders has adopted the two letter and up to four digits system, similar to the Library of Congress notation, that has been in use at the Naval Academy for the past 15 years. For libraries using the Library of Congress classification, adoption of this scheme would simply mean an assignment of an unused first letter such as K, W, X, or Y in place of B. For libraries using Dewey the problem is more complex, making classifiers regret that we do not calculate on a duodecimal basis or in even larger units so that the base of Dewey could have been broader. As a guide in the future development of Dewey, however, this aeronautical classification will undoubtedly be of major assistance.

In his assignment of notations the compiler has also attempted to allow generously for interclassification and expansion. Large blocks of numbers have been left unassigned in sections where great development seems likely to occur; smaller blocks are unassigned in less important areas, and in nearly every instance there is at least one unassigned number between those assigned.

Other expansion possibilities are provided for in the use of Cutter-type class subdivisions, such as in BG 151, "Special Airlines and Carriers" where subclassification is by name A-Z, e.g. American Airlines, A6; Trans-World Airlines, .T7. Extremely close classification is indicated throughout, as for example in BH 401 (special U. S. Air Force groups, wings, etc.) which is subarranged by similar Cutter-type divisions: .B65 (special bomber wings) which in turn is subdivided, Wing 4, Wing 22, etc., and .F43 (special fighter groups) which is subdivided Gp7, Su21, etc.

Mr. Saunders is to be congratulated on a magnificent piece of classification work. In it is evidence of much study and thought on the problems facing the classifier, and additional evidence of consultation with aeronautical engineers and aviation specialists. Only the addition of an index to aid those classifiers less adept in using a scheme such

as this would have improved it.

Correspondence with the compiler reveals that copies have been mailed to a number of libraries throughout the country that have sizable aeronautics collections, and it is assumed that requests for copies will be honored as long as the supply lasts.—George R. Luckett, U. S. Naval-Postgraduate School Library, Monterey, Calif.

Paperbounds in Print

Paperbound Books in Print. New York: R. R. Bowker, 1955. 100p. Paper, \$1.

Paperbound Books in Print is a diminutive counterpart to Books in Print, but it contains more than meets the eye at first glance. It presents on 100 pages (they look like less because a non-bulking, slick paper stock, identical to that of Library Journal, has been used) 4,500 entries of paperbacks ranging in price from 25 cents to two dollars, arranged by subject (pages 3-41) and by author (pages 42-100).

The subject arrangement follows an alphabetized list of 54 subject headings ranging from Archeology to World Affairs. Some of the headings are subdivided; for instance, Art, where books are grouped under History and Criticism. Artists, Design, and Pottery. Catalogers and classifiers may take exception to this rough subdivision, but this tool was not primarily designed for them, as they will only infrequently have the opportunity to catalog these materials.

It was not designed even for librarians in general but rather for purchasers of paperbacks, here and abroad, for all those who distribute and sell them commercially, and finally as a means of advertising for paperback publishers. The cover pictures of some of the books are shown throughout the text. It will serve librarians because it is the first and only exclusive American paperback bibliography to date and will help them in making a selection of available paperbacks from the majority of publishers in the field (44 are included). They will use it also as a location list of publishers' addresses, and as a price list, and it will be an eve-opener as to how much can be had for comparatively little money. It will help college and university librarians in their attempts to buy fewer copies of class-assigned materials by pointing out to the teaching faculty that such titles can be bought by the students.

Bibliographically, this publication presents original as well as reprint materials—which distinguishes it from Orton's Reprints in Series—and summarizes the monthly listings as found in Publishers' Weekly's "Mass Market." Planned to appear three times a year, it promises to keep the paperback record up

to date.

The subject index is selective and omits crime novels, most fiction except a few representative titles, science fiction and Western stories which can be found under the author entry in the second part of the book. Actually, there are more paperbacks in print than those listed, because the entries were chosen on the basis of titles that the publishers submitted and paid for entering in the title index. The front inside cover carries a short write-up on "How to Buy Paperbound Books," which is too brief to have much meaning for librarians. The back inside cover contains a list of publishers and their addresses. While not a complete tool, Paperbound Books in Print should help to open . many a library shelf to a yet unused or sparsely used medium of communication which commercially has already found its mass audience,-Frank L. Schick, Wayne University Library.

Charging Systems

Charging Systems. By Helen Thornton Geer. Chicago: American Library Association, 1955, 192p. \$3.75.

This comprehensive handbook was designed primarily to be a guide to the selection of a charging system which would best meet the needs of an individual library. From this one might infer that the book would be of little value to already established systems which are satisfactory enough not to be creating pressures for consideration of change. But this is not the case: in the first place, the charging system in any library should be questioned periodically in the light of technological and system improvements which are constantly being made. Recommendations by surveyors, consultants, and evaluative study groups show that many libraries are using antiquated or unsuitable systems, resulting in waste of staff time, irritation to the reader caused by mistakes, and unnecessary delay in service.

Many large and complex libraries can advantageously install systems in branches. certain reading rooms, etc. which are different from the one best suited to the main circulation point. For example, a single-card system like McBee, using no book card but exploiting one card to serve as call slip. classed circulation file, and time file, is out of place in an open-shelf reading room, where the reader already has the book in hand. Many research libraries have college or other open-shelf collections. Such collections should not employ the general circulation system, thus creating the absurd situation of having a reader fill out a call slip for a book he already has.

The author has presented the advantages and disadvantages of 17 different charging systems and also has described the routines for them involved in charging, discharging, and handling renewals, reserves, and overdues. However, it is not necessary to read the entire book, for happily she has also given an outline of these advantages and disadvantages in terms of procedures, personnel needed, equipment, and patron relations. Almost any library which has not recently reviewed its charging system in the

light of the many existing ones could to advantage exploit Misa Geer's compact study. Libraries attempting to do this will find the task much easier because of her compilation. Until now, it has been necessary for us to dig this information out of the literature as best we could. Close study of several of the systems best known to the reviewer shows that the author is correct in technical as well as general points for those systems; from this it may reasonably be deduced that she has been equally faithful in the presentation of the systems which the reviewer is not qualified to evaluate.

These practical handbooks and manuals treating various facets of the more earthly aspects of library operation not only serve to answer handily the questions we want answered, but also serve to call to our attention the desirability of reviewing procedures which we sometimes too long neglect. This handbook is one of the better ones.—William H. Jesse, University of Tennessee Libraries.

Reference Services

The Development of Reference Services through Academic Traditions, Public Library Practice and Special Librarianship. By Samuel Rothstein. (ACRL Monograph No. 14) Chicago: Association of College and Reference Libraries, 1955, ix, 124p. Paper, \$2.75; cloth, \$3.25.

Dr. Rothstein limits his survey of reference services to research libraries in the United States and to the years 1875 to 1940. A final chapter looks briefly at developments since 1940, including documentation. He cites a published statement distinguishing between reference librarians and documentalists, a statement which Dr. Rothstein answers succinctly and with evident pleasure.

Particularly interesting is the picture of the American scholar at mid-nineteenth century, a gifted and often wealthy individual with his own library, independent of other scholars and institutions, and dependent for publication on commercial agencies. In contrast the scholar of the middle twentieth century is a professional working with one or more institutions and dependent on libraries for his research because of his own lack of wealth and primarily because of the mounting mass of research materials. He demands easy access to these materials and he also demands reference service of a high order.

The development of this reference service is the subject of Dr. Rothstein's study. He sees the public library as the initial agent promoting personal aid as the core of library service and reference service in large public libraries developing from this simple aid to

Classified Advertisements

Rate: \$1 per line: three-line minimum. Closing date: first of month preceding date of issue.

BOOKS not obtainable from publishers may be available immediately from our stock of over a million volumes or may soon be found by our Search Service. Send lists to Dept. CR, Barnes & Noble, Inc., 105 Fifth Ave., New York 2, N.Y.

Headquarters For BACK DATE MAGAZINES for all research purposes MIDTOWN MAGAZINE SHOP 1105 6th Ave., between 42-43rd St. New York 36, N.Y. BR9-2897

ASSISTANT ACQUISITIONS HEAD. Responsible for business management of Acquisitions Department with expenditures of over \$200,000 annually. Background in business methods preferred, either through experience or education. Previous acquisitions work not absolutely essential. Salary, about \$5,000. Apply to Ralph H. Hopp, Assistant Director, University of Minnesota Library, Minneapolis 14. Minnesota.

FOREIGN BOOKS and periodicals, current and out-of-print. Albert J. Phiebig, Box 352, White Plains, N.Y. readers. Its development in university libraries lagged for various reasons, notably the attitude of administration and faculty towards reference librarians.

The author has skilfully traced the evolution of subject specialization in the general research library and university library, special librarianship in the legislative and municipal reference fields and, since the first World War, in the industrial research library.

Dr. Rothstein's analysis of the forces that have shaped the evolution of reference service is masterful. Only a well-controlled mind could see the pattern in so many fields of reference service and present each fully, clearly and readably, pointing out the factors of policies, practices and relationships in their development.

This ACRL Monograph should be read by all reference librarians, and perhaps with benefit by library administrators. It has substance and meaning for many of us.— Florence M. Giflord, head, General Reference Division, Cleveland Public Library.

by Frank Lloyd Wright AN AMERICAN ARCHITECTURE

The most revealing book by the World's Greatest Architect, this incomparable masterwork presents 250 photographs, sketches, original drawings and plans, many never before published.

91/2 x 121/2 \$10

THE ENCYCLOPEDIA JAZZ

by Leonard Feather,
World Jazz Authority
Foreword by Duke Ellington

Only book of its kind: 1065 biographies, 200 priceless photographs, history and analysis of jazz, index. 81/4 x 101/4 \$10

HORIZON PRESS, Publishers 220 W. 42 St., New York 36, N. Y.

basic books for the INQUIRING MIND...

"BASIC ELECTRICITY" "BASIC ELECTRONICS"

by Van Valkenburgh, Nooger & Neville, Inc.

by fan Falkenburgh, Nooger & Nettlie, Int.
The fabulous "picture book" texts derived from the
U. S. Navy's present training program! Over 25,000
Navy students have mastered these proven "learn-bypictures" courses in record time. Now, they are
available to civilian schools! There's a complete idea
on every page—and on that same page, at least one
big, clear, "show-how" drawing to illustrate the subject being discussed in the text. Over 1,700 such
ciliustrations make every phase of BASIC ELECTARICITY and BASIC ELECTRONICS picture-clear.
PAPER: Basic Electricity, 6 x 9" 5-vol. set. only \$9.00
CLOTH: All 5 volumes of either set, bound
as a single volume. only \$10.50 as a single volume ...only \$10.50

"BASIC VACUUM TUBES AND THEIR USES"

by Rider & Jacobowitz

"OBTAINING AND INTERPRETING TEST SCOPE TRACES"

by John F. Rider

"HOW TO USE METERS"

by John F. Rider

Explains everything about using all types of meters: what to use, where to use it. A must text for science PAPER ONLY: 160 pp., 51/2 x 81/2", illus.... only \$2.40

"HOW TO USE TEST PROBES"

by Chirardi & Middleton

Written by two of America's leading electronics ex-perts, this book provides a clear, easy-to-understand

introduction to test probes, their uses and construc-tion. Complete step-by-step explanations, with prac-tical examples of results and effects. PAPER ONLY: 176 pp., 5½ x 8½°, illus....only \$2.90

"HOW TO USE SIGNAL AND SWEEP GENERATORS"

by J. Richard Johnson

A how-to-do-it book that clearly explains the use of these important testing devices. Covers every major type: AM signal generators, test oscillators, marker generators, calibrators. Includes basic principles of operation; controls and adjustments; maintenance. PAPER ONLY: 144 pp., 5½ x 8½°, illus....only \$2.10

"FUNDAMENTALS OF TRANSISTORS"

by Leonard Krugman

A clear, easy-to-understand explanation of transistor characteristics and operation, written by one of the pioneers in transistor development. PAPER ONLY: 144 pp. 5½ x 8½", illus...only \$2.70

"ENCYCLOPEDIA ON CATHODE-RAY OSCILLOSCOPES AND THEIR USES"

by Rider & Uslan

The first and only book of its kind! Tells the reader all he should know about the Cathode-Ray Oscilloscope—what it is . what it can do . how to use it properly and effectively. The minutely detailed, authoritative and accurate text embraces, with full details, all phases of the cathode ray tube and oscilloscope. Practical as well as theoretical applications covering all fields are thoroughly discussed, thus assuring a consistently serviceable reference source. CLOTH ONLY: 1998 pp., 8½ x 11°, illus., only \$11.50

"BASIC SYNCHROS AND SERVOMECHANISMS"

by Van Valkenburgh, Nooger & Neville, Inc.

This is a highly informative, basic work on the fundamentals of synchros and servomechanisms—vital elements used in numerous devices employed by the Armed Forces and industry. It is profusely illustrated and has been developed and written with a clarity that furnishes a step-by-step understanding of the functioning of these systems. It is published in two volumes with paper covers, and as one volume, cloth bound, as follows:

PAPER: Vol. 1, 137 pp. 6 x 9" only \$2.75 Vol. 2, 122 pp. 6 x 9" only \$2.75 Vol. 1 & 2 only \$5.50 CLOTH: I volume, 259 pp. 6 x 9" only \$5.50

CLOTH: 1 volume, 250 pp., 6 x 9"......

AUTHORITATIVE . INFORMATIVE . ECONOMICAL ORDER YOUR COPIES TODAY 139 BOOKS AND MANUALS AVAILABLE . SEND FOR OUR CATALOGUE

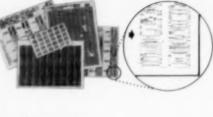


OHN F. RIDE

PUBLISHER INC 480 CANAL ST N Y . 13 N Y

microprint, n. A graphic image on an opaque base, printed in reduced size by photography or a photomechanical process and usually viewed with a suitable enlarging device.





*The Kodagraph Microprint Reader

lets you read

microprint cards in complete comfort

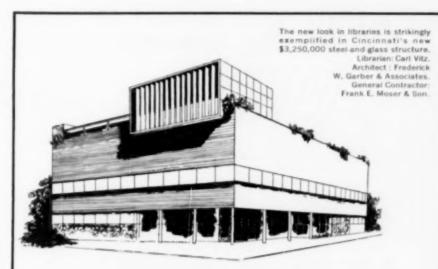
The screen is green and tilted 11° because that seems to be easiest on the eyes. There's no need to turn down the lights. The Reader sits handily on a desk or small table, a handsome instrument.

You feed microprint cards into a Kodagraph Microprint Reader like paper into a typewriter. It takes any size card up to $8\frac{1}{2}$ x 14 inches. On the screen the print is usually bigger than the original document itself.

Where do you get microprint cards? Various publishers offer microprint card editions of standard works and periodicals. Other publishers are also prepared to make microprint cards of your own literature and reports. (Send them a whole library and get it back reproduced on cards that fit a small desk file.)

Where do you see a Kodagraph Microprint Reader? Fill out the coupon and we'll let you know where the nearest dealer is.

	KODAK COMPANY
Business Photo A	Nothads Division
Rochester 4, N.	Υ.
Please send mo	the information checked
☐ Where I can Microprint R	see a Kodagraph eader.
Folder on the microprint of	e Roader and sample ard.
cords and m	shers of microprint constacturers of ards to order.
HAME	
ADDRESS	-
	Kodak



CHOSEN FOR ANOTHER DISTINGUISHED AMERICAN LIBRARY— VMP BOOKSTACKS AND LIBRARY EQUIPMENT



Multi-tier, top braced stack in Cincinnati's new library is pictured here before books were placed on the shelves. This type of stack is fastened to the floor, and has channel members across the top of the columns to assure rigidity. Whatever the need in library equipment, VMP can fill it. Shelves, stacks, desks, lights—even conveyors—are only a few of the many products made by VMP specifically for library use.

VMP helps you plan. In the earliest stages of planning, VMP's Library Planning Service can be of special help to architect or owner. With years of specialized experience behind them, VMP's skilled engineers can help settle such basic questions as whether to have multi-tier or free-standing bookshelves. With VMP's technical aid, needless duplication of development work is avoided. Thus, over-all construction costs are pared.

Catalog on request. We will gladly send a 7-page folder with details and specifications on VMP library bookstack equipment. Address inquiries to Dept. CRL-1



ORANGE, VIRGINIA Subsidiary of Chesopooke Industries, Inc.

NEW!



first supplement

Twentieth Century Authors

Edited by Stanley J. Kunitz

Over three years in preparation, this just-published First Supplement to Twentieth Century Authors contains a total of 2,550 up-to-date biographical entries on authors from all over the world who write in English or are available in English translation. These include 700 entirely new sketches which did not appear in the 1942 foundation volume, and supplementary material for most of the foundation volume's 1,850 entries.

Running to a mammoth 1,123 pages, the Supplement is written in the same tradition that made the original volume the bestthumbed of standard reference works in American and foreign libraries and caused reviewers to label it "indispensable"—"a "must' for every library reference shelf."

As with the original volume, this new Supplement's usefulness stems in part from the autobiographical material contributed by the authors themselves. "They have been granted," says editor Stanley Kunitz, "the opportunity to express themselves freely."

A selected list both of the author's works and of biographical articles and books follows each sketch.

Among the new biographies in the First Supplement are those of: Truman Capote, James Jones, Norman Mailer, Christopher Fry, Cleveland Amory, Lillian Smith, Giovanni Guareschi, Thomas Merton, Thomas B. Costain, and Tennessee Williams.

1,123 pages

Cloth Bound

\$8.00

Order from:



The H. W. Wilson Company 950-972 University Ave., N. Y. 52

TWICE THE BOOKS IN YOUR PRESENT SPACE

. . . EACH EASILY ACCESSIBLE . . . WITH

Hamilton []]

More books than space? In college, research and public libraries this familiar problem is now easily solved by Compo stacks.

Remarkable sliding steel shelves let you store books on three sides of each Compo sliding drawer. Every book is in easy reach and you double your book capacity, providing maximum utilization of all available space.



Compo wall stacks
"a," diagram 2 are
of equal book copacity to all conventional stacks,
diagram 1.

Compo wall stacks
"a" with the addition of Compo stack
"b" are double the
book capacity of
conventional
arrangement,
diagram 1.

Continuous Upright

Mamilton also affers conventional stacks—Continuous Upright and Hamiton-Standard. They're handsomely designed, equipped with adjustable shelves, built for years of efficient service, by the world's foremost specialist in professional equipment—Hamiton.

Complete information is well worth having. Write today.



NAMILTON MANUFACTURING COMPANY
Two Rivers, Wisconsin

Hamilton LIBRARY EQUIPMENT





NO. C-282 Multi-Level Circulation Desk. A desk with MICOLOR top and shelving wing. Cabinet on exterior side closed with sliding doors.

THE FINEST IN LIBRARY FURNITURE

Finest because Sjöström emphasizes quality, looks ahead to tomorrow, meets new needs with new designs.

Just introduced are the units shown and MICOLOR—Formica tops in 4 basic colors.

Catalog L-54 describes the "New Life" line; Circular C-553 describes the units shown and MICOLOR tops. Ask for either or both.



NO. 291-30RS Reference Unit. Combines 30 drawer card catalog with auxiliary shelving (reverse side) and counter-height table.



SJÖSTRÖM OF PHILADELPHIA

1717 NORTH TENTH STREET, PHILADELPHIA 22, PA.



Expert Service on

MAGAZINE SUBSCRIPTIONS

for

ALL LIBRARIES

Faxon's Librarians Guide

free on request

For the very best subscription service at competitive prices—ask about our Till Forbidden plan.

F. W. FAXON CO., INC.

83-91 Francis Street

Boston 15, Mass.

Continuous Library Service Since 1886

ALBERT DAUB & CO., Inc.

Booksellers

257 Fourth Avenue New York 10, N.Y.

EXPERT HANDLING OF YOUR ORDERS FOR

Foreign and domestic books and periodicals, new and second-hand.

Domestic books supplied with library discount. Foreign books supplied at current rate-of-exchange.

Out of prints searched for here and abroad.

Prompt attention given to requests for quotations and inquiries.

We sincerely believe that we can please you with our service and prices.

Ours is a personalized library service

CUSHING-MALLOY, INC.

Ann Arbor, Michigan

Printers of ACRL Monographs

LITHOPRINTERS

Known for

QUALITY-ECONOMY-SERVICE

Let us quote on your next printing

Ready March 1956		
American Chemical Society: Journal Volumes 26-27, 1904-1905		
Single volumes, paper bound	each approx.	\$35.00
Ready February 1956		
Biochimicaet Biophysica Acta Volume 4, 1950, paper bound	approx.	20.00
Volume 7, 1951, paper bound	approx	
Volume 8, 1952, paper bound	approx	
Now Available		
Brain: A Journal of Neurology		
Volumes 1-15, 1878-1892, paper bound set		300.00
Single volumes, paper bound	each	20.00
Ready March 1956		
Chemical Reviews Volume 1, 1924-1925, paper bound		17.50
Volume 1, 1924 1923, paper bound Volumes 46-49, 1950 1951		11.0
Single volumes, paper bound	each	17.5
Now Available		
Faraday Society, London: Transactions		
Volumes 26-30, 1930-1934		
Single volumes, paper bound	each	25.00
Volumes 1-30, 1905-1934 General Index to Volumes 1-20		
Paper bound set		485.50
Ready February 1956		
Journal of Organic Chemistry (Slightly reduced format)		
Volume 15, 1950, paper bound Volume 16, 1951, paper bound		25.00 35.00
Ready March 1956		
Journal of Physical Chemistry (Slightly reduced format)		
Volumes 31 33, 1927-1929		
Single volumes, paper bound	each	40.00
Volumes 34-36, 1930-1932		
Single volumes, paper bound	each	50.00 25.00
Volume 53, 1949, paper bound		23.04
Now Available Journal of the Textile Institute		
Volumes 1 15, 1910-1924, cloth bound set		250.00
Paper bound set		235.04
Volumes 1-8, 1910-1917, single volumes,		10.00
cloth bound	each each	15.50
Single volumes, paper bound Volumes 9 12, 1918 1921, single volumes,	Cach	2.0.00
cloth bound	each	17.50
Single volumes, paper bound	each	17.00
Volumes 13-15, 1922-1924, single volumes,	each	25.00
cloth bound Single volumes, paper bound	each	24.00
	Cach	2.4.00
Ready January 1956 Nucleonics		
Volumes 1-9, 1947-1951		
Cloth bound set		155.00
Single volumes, paper bound	each	15.00



JOHNSON REPRINT CORPORATION

=125 East 23 Street, New York 10, New York=

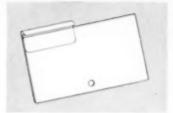
What Makes this Card Catalog So Special?



At first glance this may look like an ordinary catalog drawer but close inspection shows you that reference can be made much faster and easier because of Gaylords' special tilted tab guides and printed guide headings.

You will also find that many cards (those referred to most often) are protected with transparent, acetate covers. The cards are Gaylards Super-Quality 100% all new, white rag stock.

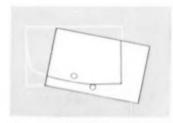
Write TODAY for complete details and prices.



TILTED TAB GUIDES have transparent cellulose acetate tabs tilted at a 45% angle for easy reading. Even when cards are slanted forward there is sufficient clearance under the tabs so catalog cards will not cling to the guides.



PRINTED GUIDE MEADINGS fit the tilted tab quides, eliminating tiresome typing, and providing improved appearance. Four different sets, ranging from 250 headings to 5,400 headings, are available to meet your every requirement.



CATALOG CARD PROTECTORS prevent soil marks, handling abuse and costly replacement of cards in "busy sections of catalog". Self-paying protectors are made of transparent acetate, easily and quickly slipped over cards.



GAYLORD BROS., INC.

LIBRARY SUPPLIES SYRACUSE, N. Y. STOCKTON, CALIF.

"The house of prompt, friendly, personal service"

Ready January 1956

BRITISH SCIENTIFIC

TECHNICAL BOOKS

Published for ASLIB

Foreword by F. FRANCIS (Keeper, Dept. of Printed Books, British Museum)

A bibliography of the most important and useful books on science and technology published in the United Kingdom and the Dominions between 1935 and 1952.

\$11.50

Volume I Ready Now

BRITISH UNION-CATALOGUE OF PERIODICALS.

Edited for the Council of the British Union-Catalogue of Periodicals by J. D. STEWART, with M. E. HAMMOND and E. SAENGER

A Record of Periodicals of the World, from the 17th Century to the Present Day, in British Libraries.

To be complete in 4 vols.

per vol. \$32.20

STECHERT-HAFNER Inc.

Founded in New York 1872

The World's Leading International Booksellers

31 EAST 10th STREET, NEW YORK 3, N.Y.